

CRYSTAL STRUCTURE OF VEGFRKD: LIGAND COMPLEXES  
AND METHODS OF USE THEREOF

5           This application claims the benefit of U.S. Provisional Application Serial No. 60/463,957, filed April 17, 2003, the disclosure of which is incorporated herein by reference in its entirety.

Background of the Invention

10           Protein kinases are a family of enzymes that catalyze phosphorylation of the hydroxyl group of specific tyrosine, serine, or threonine residues in proteins. Typically, such phosphorylation dramatically perturbs the function of the protein, and thus protein kinases are pivotal in the regulation of a wide variety of cellular processes, including metabolism, cell proliferation, cell differentiation, and cell survival. Of the many different cellular functions in which the activity of protein kinases is known to be required, some processes represent attractive targets for therapeutic intervention for certain disease states. One example is angiogenesis, the sprouting of new blood vessels from existing vasculature.

15           Vascular endothelial growth factors (VEGFs) and their receptor tyrosine kinases (VEGFRs) are key components in angiogenesis. Human VEGFRs are known to include, for example, the homologous proteins VEGFR-1 (also referred to as "Flt-1"), VEGFR-2 (also referred to as "KDR"), and VEGFR-3 (also referred to as "Flt-4"). VEGFR-1 and VEGFR-2 are expressed preferentially on vascular endothelial cells and VEGFR-2 has been associated with the proliferation and survival of endothelial cells. The extracellular domain of VEGFR-2 binds the potent angiogenic growth factor VEGF and mediates the subsequent signal transduction through activation of its intracellular kinase activity. VEGFR-3 is expressed preferentially on lymphatic endothelial cells and is involved in lymphangiogenesis. (see PCT international application publication number WO 95/21613; Gerwins et al. (2000) Crit. Rev. Oncology/Hematology 34: 185-194; Ferrara and Davis-Smyth (1997) Endocrine Rev. 18(1): 4-25.

25           Angiogenesis is essential for embryonic development and other normal physiological processes such as wound healing and formation of the corpus luteum, endometrium and placenta. However, when angiogenesis occurs at an inappropriate time or location, numerous disease states and other undesirable conditions sometimes arise. For example, angiogenesis is involved in other diseases and conditions, including arthritis and atherosclerotic plaques, diabetic retinopathy, neovascular glaucoma, trachoma and corneal graft neovascularization, psoriasis, scleroderma, hemangioma and hypertrophic scarring, vascular adhesions and angiofibroma. Angiogenesis is also essential for solid tumor growth and metastasis. Folkman (1990) J. Nat'l. Cancer Inst. 82: 4-6; Kim et al. (1993) Nature 362: 841-844; Hori et al. (1991) Cancer Res. 51: 6180-6184; Millauer et al. (1994) Nature 367: 576-579; Sim et al. (1997) Cancer Res. 57: 1329-1334. Tumor cells are believed to cause a local disruption of the delicate balance that normally exists between angiogenesis inhibitors and stimulators. According to this model, by producing angiogenesis stimulators, such as VEGF, tumors cause a local increase in the ratio of stimulators to inhibitors, which induce the formation of new blood vessels that carry oxygen and nutrients to the growing tumor. See, e.g., O'Reilly (1997) Regulation of Angiogenesis, Goldberg & Rosen, Eds., Birkhauser Verlag, Basel, pp. 273-294.

30           

35           

40

Thus, agents which are capable of modulating the kinase activity of VEGFRs, are desired and may be used to treat disorders related to vasculogenesis or angiogenesis. Such disorders include, but are not limited to, diabetes, diabetic retinopathy, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer. One means of modulating a kinase activity of VEGFR is to identify enhancers or inhibitors to the VEGFR. Such identification has heretofore relied on serendipity and/or systematic screening of large numbers of natural and synthetic compounds. A superior method of drug development relies on structure assisted drug design. In this case, the three-dimensional structure of a peptide-inhibitor complex is determined and potential enhancers and/or potential inhibitors are screened and/or designed with the aid of computer modeling [Bugg *et al.*, *Scientific American*, Dec.: 92-98 (1993); West *et al.*, *TIPS*, 16: 67-74 (1995); Dunbrack *et al.*, *Folding & Design*, 2: 27-42 (1997)].

Like other protein kinases, the kinase domain (KD) of VEGFRs is known to contain a large flexible loop, referred to as the kinase activation loop, whose conformation has been postulated to regulate kinase activity. In many kinases, the conformation of the activation loop is controlled by the phosphorylation of specific activation loop residues. The loop can generally be defined as beginning with the conserved residues DFG and ending at the conserved APE sequence. In VEGFR2, this segment has been reported as corresponding to D1046-E1075 and as containing two tyrosines (Y1054 and Y1059). See U.S. Patent No. 6,316,603. For protein kinases in general, in the activated (usually phosphorylated) form, this loop adopts an "open" conformation that permits the catalytically competent binding of Mg-ATP and substrates. In the non-activated form, generally non-phosphorylated, many different conformations of this loop have been reported for various kinases (reviewed in Johnson, L.N. *et al.*, *Cell* 85: 149-158 (1996)).

The three-dimensional structure of unliganded, phosphorylated VEGFR2 kinase domain (KD) has previously been reported. See U.S. Patent No. 6,316,306; McTigue *et al.*, *Structure*, Vol. 7, No. 3, pages 319-330 (1999). However, in this structure of the unliganded, phosphorylated VEGFR2KD a conformation for most of the kinase activation loop (residues 1048-1063) could not be modeled due to a lack of interpretable electron density, most likely caused by dynamic disorder.

The structures of serine/threonine and tyrosine protein kinases have been reported with and without bound ligands. See, *e.g.*, the reported kinase structures found in Pargellis *et al.*, *Nat. Struct. Biol.* 9(4): 268-272 (2002); Schindler *et al.*, *Science* 289: 1938-1942 (2000); Knighton, D.R. *et al.*, *Science* 253: 407-413 (1991); Johnson, L.N. *et al.*, *Cell* 85: 149-158 (1996); Hubbard, S.R. *et al.*, *Nature* 372: 746-754 (1994). However, for purposes of drug design, the reported structures differ significantly from that discovered for the VEGFR2KD: ligand complexes described herein.

Heretofore the three-dimensional structure of the unphosphorylated, liganded VEGFR2KD has remained unknown, essentially because no crystals have been produced of sufficient quality to allow the required X-ray crystallographic data to be obtained. Therefore, there is presently a need for obtaining an unphosphorylated VEGFRKD: ligand crystal complex of sufficient quality to allow such crystallographic data to be obtained. Further, there is a need for such crystals. There is also a need for the determination of the three-dimensional structure of such crystals. Finally, there is a need for procedures for related structural based drug design and/or screening based on the crystallographic data.

The citation of any reference herein should not be construed as an admission that such reference is available as "Prior Art" to the instant application.

#### Brief Description of the Drawings

5       **Figure 1.** Figure 1 is a ribbon representation of VEGFR2KD in complex with Compound 2. The ribbon is generated from the protein backbone coordinates (C, N, Ca, O) listed in Table 2. The approximate backbone positions of some residues are denoted by their residue numbers.

**Figure 2A.** Figure 2A is a stick representation of the ligand binding site of the VEGFR2KD: Compound 2 complex crystalline structure. Sidechain atoms are shown for only those residues that  
10       have been defined as forming part of the ligand binding site. This figure was generated using atomic coordinates listed in Table 2.

**Figure 2B.** Figure 2B is a stick representation of the ligand binding site of the VEGFR2KD: Compound 1 complex crystalline structure. Sidechain atoms are shown for only those residues that  
15       have been defined as forming part of the ligand binding site. This figure was generated using atomic coordinates listed in Table 1.

#### Sequence Listing

**SEQ ID NO: 1** Human VEGFR2 Nucleic Acid Sequence  
(Genbank Accession number 2655412 )  
**SEQ ID NO: 2** Human VEGFR2 Amino Acid Sequence  
20       (Swiss-Prot Accession Number P35968)  
**SEQ ID NO: 3** Human VEGFR2KD Construct Amino Acid Sequence  
**SEQ ID NO: 4** Human VEGFR1 Amino Acid Sequence  
(Swiss-Prot Accession number P17948)  
**SEQ ID NO: 5** Human VEGFR3 Amino Acid Sequence  
25       (Swiss-Prot Accession number P35916)  
**SEQ ID NO: 6** PCR oligonucleotide primer sequence for Vcyt5  
**SEQ ID NO: 7** PCR oligonucleotide primer sequence for Vcyt3  
**SEQ ID NO: 8** PCR oligonucleotide primer sequence for Vcat5  
**SEQ ID NO: 9** PCR oligonucleotide primer sequence for Vcat3  
30       **SEQ ID NO: 10** Oligonucleotide primer sequence for construct Vcat  
(Δ G1172-G 1191)  
**SEQ ID NO: 11** Oligonucleotide for deletion of amino acid residues  
T940-E989 of SEQ ID NO: 1

#### Summary of the Invention

35       The invention relates to three-dimensional crystalline structures of VEGFRKD, or a structurally related peptide, and VEGFRKD:ligand complexes, particularly VEGFR2KD: ligand complexes. The invention also relates to crystallographic data derived therefrom, as set forth in Tables 1, 2, 3, 4, and/or 5, and use of the data in drug design and development. It has been  
40       discovered that the VEGFRKD, or structurally related peptide, comprise a ligand binding pocket that is defined by the atoms found in the structural coordinates set forth in Tables 1, 2, 3, 4 or 5, or in a related set of structural coordinates having a root mean square deviation of not more than about 0.90

Å away from the binding pocket Cα atoms of the ligand binding pocket defined by the atoms found in the structural coordinates set forth in Tables 1, 2, 3, 4 or 5. The ligand binding pocket is of approximate dimensions 12 Å x 9 Å x 25 Å, and is depicted in Figure 1, Figure 2A, or Figure 2B. The ligand binding pocket is also defined by the structural coordinates of the following amino acid residues: L840, V848, E850, A866, V867, K868, E885, I888, L889, I892, V898, V899, V914, V916, E917, F918, K920, F921, N923, L1019, C1024, I1025, H1026, L1035, I1044, C1045, D1046, and F1047 of SEQ ID NO: 2 or a conservatively substituted variant thereof. The VEGFRKS also comprises an activation loop defined by amino acid residues 1046 to 1075 of SEQ ID NO: 2, or a conservatively substituted variant thereof, as depicted in Figure 1.

The invention also relates to a method of using the VEGFRKD: ligand crystalline structures of the invention, and atomic coordinates thereof, to identify a potential VEGFR modulator, or a modulator of a peptide structurally related to VEGFR, comprising:

- (a) selecting a potential modulator by performing rational drug design using a three-dimensional structure defined by at least a portion of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 1.25 Å away from the core Cα atoms of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5;
- (b) contacting the potential modulator with a vascular endothelial growth factor receptor (VEGFR) polypeptide; and
- (c) detecting whether the potential modulator binds with the polypeptide.

The selection may be performed in conjunction with computer modeling.

The invention further includes a method for evaluating the potential of a chemical entity to associate with a VEGFRKD ligand binding pocket or VEGFRKD-like ligand binding pocket comprising:

- (a) employing computational means to perform a fitting operation between the chemical entity and a ligand binding pocket defined by at least a portion of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 0.90 Å away from the core Cα atoms of the atomic coordinates as set forth in Tables 1, 2, 3, 4 or 5; and
- (b) analyzing the results of the fitting operation to quantify the association between the chemical entity and the binding pocket.

Additionally, the invention is directed to a method for evaluating the ability of a chemical entity to associate with a molecule or molecular complex comprising a VEGFRKD or VEGFRKD-like ligand binding pocket, comprising

- (a) constructing a computer model of a ligand binding pocket defined by at least a portion of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 0.90 Å away from the core Cα atoms of the atomic coordinates as set forth in Tables 1, 2, 3, 4 or 5;
- (b) selecting a compound to be evaluated by a method selected from the group consisting of:
  - (i) assembling molecular fragments into a compound, (ii) selecting a compound from a small



molecule database, (iii) *de novo* ligand design of a compound, and (iv) modifying a known modulator, or a portion thereof, of a VEGFR;

(c) employing computational means to perform a fitting program operation between a computer model of the compound to be evaluated and the computer model of the ligand binding pocket to provide an energy-minimized configuration of the compound in the binding pocket; and

(d) evaluating the results of the fitting operation to quantify the association between the compound and the binding pocket model.

The invention also includes a method for identifying a modulator of a molecule comprising a VEGFRKD ligand binding pocket or VEGFRKD-like ligand binding pocket, comprising:

(a) generating a three-dimensional structure of the VEGFRKD or VEGFRKD-like ligand binding pocket by applying at least a portion of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 0.90 Å away from the core Cα atoms of the atomic coordinates as set forth in Tables 1, 2, 3, 4 or 5, to a computer algorithm to generate a three-dimensional structural representation of the binding pocket;

(b) employing the three-dimensional structure to design or select the modulator;

(c) synthesizing or obtaining the modulator; and

(d) contacting the modulator with the molecule to determine the ability of the modulator to interact with the molecule.

Another method for identifying a modulator of a VEGFRKD ligand binding pocket or VEGFR2KD-like ligand binding pocket, comprises:

(a) constructing a computer model of the binding pocket;

(b) selecting a compound to be evaluated as a modulator by a method selected from the group consisting of: (i) assembling molecular fragments into a compound, (ii) selecting a compound from a small molecule database, (iii) *de novo* ligand design of a compound, and (iv) modifying a known inhibitor, or a portion thereof, of a VEGFR polypeptide;

(c) employing computational means to perform a fitting program operation between computer models of the compound to be evaluated and the binding pocket in order to provide an energy-minimized configuration of the compound in the binding pocket;

(d) evaluating the results of the fitting operation to quantify the association between the compound and the binding pocket model;

(e) synthesizing the compound; and

(f) contacting the compound with the molecule to determine the ability of the compound to modulate the kinase activity of the molecule,

wherein the ligand binding pocket is defined by at least a portion of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 0.90 Å away from the core Cα atoms of the atomic coordinates set forth in Tables 1, 2, 3, 4 or 5.

One ligand binding pocket that can be used in each of the foregoing methods of the invention is defined by the atomic coordinates of the following amino acid residues: L840, V848, E850, A866,

V867, K868, E885, I888, L889, I892, V898, V899, V914, V916, E917, F918, K920, F921, N923, L1019, C1024, I1025, H1026, L1035, I1044, C1045, D1046, and F1047 of SEQ ID NO: 2 or a conservatively substituted variant thereof.

#### Detailed Description of the Invention

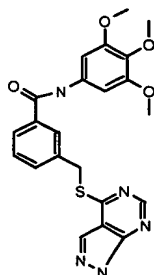
##### 5 Definitions

As used herein, the terms "comprising" and "including" are used in an open, non-limiting sense.

As used herein, the acronym "VEGFR" refers to a vascular endothelial growth factor receptor or proteins structurally related thereto, including, but not limited to VEGFR1 (SEQ ID NO: 4),  
10 VEGFR2 (SEQ ID NO: 2), and VEGFR3 (SEQ ID NO 5). The preferred receptor is VEGFR2. The VEGFR peptide may be modified as described herein.

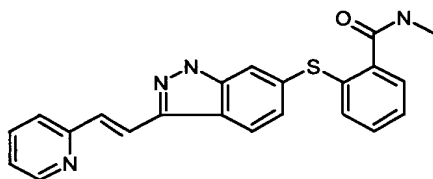
As used herein, the acronym "VEGFRKD" refers to a VEGFR kinase domain, preferably the VEGFRKD of SEQ ID NO: 3, and conservatively substituted variants thereof. It is intended that VEGFRKD encompasses any peptide containing the domains of approximately amino acid residues  
15 820 to 930 and 1002 to 1171 of SEQ ID NO: 2, and conservatively substituted variants thereof.

As used herein, Compound 1 refers to:

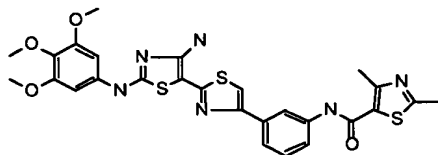


As used herein, Compound 2 refers to:

20

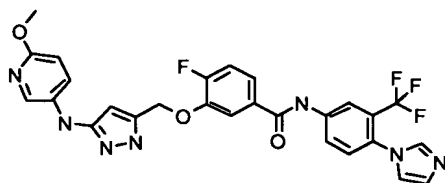


As used herein, Compound 3 refers to:

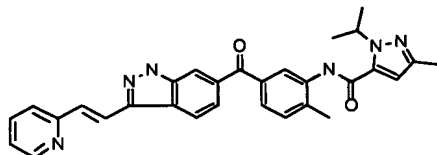


25

As used herein, Compound 4 refers to:



As used herein, Compound 5 refers to:



5

As used herein, the phrase "root mean square deviation" ("RMS") means the square root of the arithmetic mean of the squares of the deviations from the mean and denotes a measure of the structural relationship between two or more species of proteins. It may be determined by, for example, superimposing one three-dimensional structure onto another, which may be solved by using, for example, X-ray crystallography or nuclear magnetic resonance (NMR), and then, calculating the difference in the RMS of the distance from the C $\alpha$  and/or backbone (N, C, O, and C $\alpha$ ) trace (or atoms) of one protein to another protein in units of Angstroms (Å). The superimposition of three-dimensional structures may be performed using a molecular modeling program such as, for example, the Superimpose command in Insight II (Accelrys Inc., San Diego, CA), CNX (Accelrys Inc., San Diego, CA), XtalView<sup>TM</sup> (Scripps Research Institute, La Jolla, CA), SYBYL<sup>®</sup> (Tripos, Inc., St. Louis, MO), or O (Aarhus Univ., Denmark (Jones, T.A. et al., Acta Cryst. A47: 110-119 (1991)), or other related computer modeling programs or scripts, alone or in combination. For example, the Superimpose command in Insight II, performs a minimum RMS alignment of two molecules on selected sets of atoms from each molecule is then outputs the RMS deviation value between the selected atoms of the superimposed molecules. The closer the relationship between the three-dimensional structures, the smaller the RMS deviation value. Therefore, one embodiment of this invention is the three-dimensional structures of the VEGFR2KD complexes of the invention. An additional embodiment is crystals of a "structurally related" peptide and the three-dimensional structures thereof.

As used herein, "structurally related" protein or peptide refers to a protein or peptide that is defined by the atomic coordinates set forth in Table 1, Table 2, Table 3, Table 4, and/or Table 5, or by a related set of atomic coordinates having a root mean square deviation of from not more than about 1.25 Å from the core C $\alpha$  atoms of the atomic coordinates set forth in Tables 1, 2, 3, 4, or 5. Preferably the root mean square deviation is not more than about 1.25 Å, more preferably not more than about 1.00 Å, and most preferably not more than about 0.75 Å. Examples of proteins structurally related to VEGFR2 include, but are not limited to, VEGFR1 and VEGFR3. Additionally, examples of proteins structurally related to VEGFR include, for example, platelet derived growth factor receptor

30

(PDGFR), such as, PDGFR $\alpha$ , PDGFR $\beta$ , colony stimulating factor-1 receptor, and stem cell growth factor receptor.

Similarly, as used herein, "related set of structural coordinates" or "related set of atomic coordinates" refers to a set of structural (e.g. atomic) coordinates having a root mean square deviation of not more than about 1.25 Å from the C $\alpha$  atoms of the structural coordinates a set forth in Table 1, Table 2, Table 3, Table 4, and/or Table 5. Preferably the root mean square deviation is not more than about 1.25 Å, more preferably not more than about 1.00 Å, and most preferably not more than about 0.75 Å.

As used herein, the phrase "chemical entity" refers to a chemical compound, a complex of at least two chemical compounds, or a fragment of such a compound or complex. Such entities are potential drug candidates and can be evaluated for their ability to modulate the activity of a VEGFR. The ability of an entity to bind to, or associate with, a VEGFRKD ligand-binding pocket, depends on the features of the entity. Assays to determine if a compound binds to the kinase domain are known in the art, such as those exemplified in U.S. Patent No. 6,316,603.

As used herein, the term "ligand" means a molecule that binds to or associates with an enzyme and can be used to mean a VEGFR activity inhibitor or enhancer.

As used herein, the terms "modulator" and "modulatory," and variations thereof, are used in an open, non-limiting sense. Preferably, the modulator is an inhibitor or enhancer of a VEGFR activity whereby the activity is either (1) decreased, stopped, prevented, slowed, or retarded, or (2) increased, encouraged, or sped up, respectively. The preferred modulator is an inhibitor. The most preferred modulator is an inhibitor of kinase activity. The kinase domain ligand binding pocket may be used to design molecules which bind at the site and modulate, for example, inhibit or enhance, kinase activity. The modulators, preferably, inhibitors, can then be developed into therapeutics for treating diseases, such as angiogenic or vascular diseases for which VEGFRs are causative factors.

As used herein, the term "inhibitor" or "inhibit" (or variations thereof) refers to a ligand such as a compound or substance that lowers, reduces, decreases, prevents, diminishes, stops or negatively interferes with a VEGFR activity. Often the terms "inhibitor" and "antagonists" can be used interchangeably.

As used herein,  $K_i$  refers to a well known standard for "inhibition constant", where "K" stands for constant and "i" stands for inhibition, and represents the point where 50% of the target (e.g., VEGFR) is inhibited.  $K_i$  are determined by measuring enzyme activity in the presence of varying concentrations of test compound in assays such as those described, for example, in Example 6 and U.S. Patent No. 6,316,306. Data can be analyzed using Enzyme Kinetic and Kaleidagraph software.

As used herein, the term "enhancer" or "enhance" (or variations thereof) refers to a ligand such as a compound or substance that improves, increases, stimulates, raises or positively interferes with a VEGFR activity. Often the terms "enhancer" or "agonists" can be used interchangeably. An enhancer would increase the enzyme's activity.

As used herein, the phrase "binding pocket," also referred to as "binding site," "ligand-binding site," "catalytic domain," or "ligand-binding pocket," refers to a region or regions of a molecule or molecular complex, that, as a result of its shape, can associate with another chemical entity or compound. Such regions are useful in fields such as drug discovery. The association of natural

ligands or synthetic ligands with binding pockets of their corresponding receptors is the basis of many biological mechanisms of action. Similarly, many drugs exert their biological effects via an interaction with the binding pockets of a receptor. Such interactions may occur with all or part of the binding pocket. An understanding of such interactions can facilitate the design of drugs having more favorable and specific interactions with their target receptor and thus, improved biological effects. Therefore, information related to ligand binding with a VEGFR2KD ligand-binding pocket is valuable in facilitating the design and discovery of modulators of other VEGFRs and potentially other structurally related peptides. Furthermore, the more specificity in the design of a potential drug, the more likely that the drug will not interact with similar proteins, thus minimizing potential side effects due to unwanted cross interactions.

As used herein, a "VEGFRKD-like" peptide binding pocket refers to a peptide binding pocket defined by the atoms found in the structural coordinates as set forth in Table 1, Table 2, Table 3, Table 4 and/or Table 5, or defined by structural coordinates having a root mean square deviation of not more than about 0.90 Å from the binding pocket Cα atoms of any one of the VEGFR2 binding pockets set forth herein, or a conservatively substituted variant thereof. Preferably the root mean square deviation is not more than about 0.90 Å, more preferably not more than about 0.75 Å, and most preferably not more than about 0.60 Å.

As used herein, the term "activity" refers to all VEGFR activities, e.g. kinase activities, etc., as well as to the enzyme's potency. The terms "activity" and "function" are used interchangeably herein.

As used herein, the terms "model" and "modeling" mean the procedure of evaluating (also referred to as "assessing") the affinity of the interaction between a VEGFRKD or VEGFRKD-like binding pocket and a chemical entity (also referred to as a "candidate compound") based on, for example, steric constraints and surface/solvent electrostatic effects.

#### **Nucleic Acids and Polynucleotides**

Isolated nucleic acid molecules that encode members of the VEGFR family or proteins structurally related thereto are utilized in the present invention. More preferably, the nucleic acid molecules encode the kinase domain of a VEGFR or structurally related protein. Exemplary nucleic acid molecules encode the kinase domain of VEGFR2 or a modified VEGFR2.

Preferably, the nucleic acid molecules encode a modified, unphosphorylated VEGFR2 polypeptide wherein the kinase domain (KD) thereof has an amino acid sequence comprising SEQ ID NO: 3, as described in U.S. Patent No. 6,316,603, which is incorporated by reference herein in its entirety. The modified VEGFR2KD contains a deletion of fifty amino acid residues when compared to the wild-type polypeptide kinase domain (see SEQ ID NO: 2). It is unlikely that this deletion significantly affects the conformation of the ligand binding site on the kinase. The kinetic phosphotransfer properties of the modified protein construct are similar to those of a construct containing the entire kinase insert domain, as expected, since the deleted section is a subdomain that is not necessary for catalytic phosphotransfer activity. The modified VEGFR2KD also contains one point mutation (E990V) compared to the wild-type VEGFR2 polypeptide (SEQ ID NO: 2). See U.S. Patent No. 6,316,306; McTigue et al., *Structure*, Vol. 7, No. 3, pages 319-330 (1999).

The terms "nucleic acid molecule" and "polynucleotide" are used interchangeably in this application. These terms refer to any polyribonucleotide or polydeoxynucleotide, which may be

unmodified RNA or DNA or modified RNA or DNA. These terms are intended to include DNA molecules (e.g., cDNA) and RNA molecules (e.g., mRNA) and analogs of the DNA or RNA generated using nucleotide analogs. Exemplary polynucleotides include single- and double-stranded DNA, DNA that is a mixture of single- and double-stranded regions or single-, double- and triple-stranded regions, single- and double-stranded RNA, and RNA that is mixture of single- and double-stranded regions, hybrid molecules comprising DNA and RNA that may be single-stranded or, double-stranded, or triple-stranded regions, or a mixture of single- and double-stranded regions. In addition, "polynucleotide" and "nucleic acid molecule" as used herein refer to triple-stranded regions composed of RNA or DNA, or both RNA and DNA. The strands in such regions may be from the same molecule or from different molecules. The regions may include all of one or more of the molecules, but more preferably involve only a region of some of the molecules. One of the molecules of a triple-helical region may be an oligonucleotide.

Exemplary polynucleotides and nucleic acid molecules also include DNAs or RNAs as described above that contain one or more modified bases. Moreover, DNAs or RNAs comprising unusual bases, such as inosine, or modified bases, such as tritylated bases are exemplary polynucleotides. Exemplary polynucleotides and nucleic acid molecules also include chemically, enzymatically or metabolically modified forms of polynucleotides, as well as the chemical forms of DNA and RNA characteristic of viruses and cells, including, for example, simple and complex cells. Exemplary polynucleotides also include short polynucleotides referred to as oligonucleotides.

As used herein, the term "isolated" nucleic acid molecule means that the material is free of proteins and other nucleic acid present in the natural environment in which the material is normally found. In particular, the nucleic acid molecule is free of cellular components. Exemplary isolated nucleic acid molecules include PCR products, mRNA, cDNA, or restriction fragments. In another embodiment, an isolated nucleic acid is preferably excised from the chromosome in which it may be found, and more preferably is no longer joined to non-regulatory, non-coding regions, or to other genes, located upstream or downstream of the gene in its natural environment in the chromosome. In yet another embodiment, the isolated nucleic acid lacks one or more introns. Isolated nucleic acid molecules can be inserted into plasmids, cosmids, artificial chromosomes, and the like. Thus, in a specific embodiment, a recombinant nucleic acid is an isolated nucleic acid. Moreover, an "isolated" nucleic acid molecule, such as a cDNA molecule, can be substantially free of other cellular material, or culture medium when produced by recombinant techniques, or chemical precursors or other chemicals when chemically synthesized. However, the nucleic acid molecule can be fused to other coding or regulatory sequences and still be considered isolated.

For example, a recombinant DNA molecule contained in a vector is considered isolated. Further examples of isolated DNA molecules include recombinant DNA molecules maintained in heterologous host cells or purified (partially or substantially) DNA molecules in solution. Exemplary isolated RNA molecules include *in vivo* or *in vitro* RNA transcripts of the isolated DNA molecules described herein. Exemplary isolated nucleic acid molecules further include such molecules produced synthetically.

[0001] Full-length genes or portions thereof may be cloned using any one of a number of suitable methods known in the art. For example, a method that employs XL-PCR (Perkin-Elmer, Foster City, Calif.) to amplify long pieces of DNA may be used.

5 The isolated nucleic acid molecules can encode functional polypeptides plus additional amino or carboxyl-terminal amino acids, such as those that, e.g., facilitate protein trafficking, prolong or shorten protein half-life, or facilitate manipulation of a protein for assay or production. Once a full-length gene is cloned, portions of the gene can be obtained using known techniques.

10 Isolated nucleic acid molecules can be in the form of RNA, such as mRNA, or in the form of DNA, including cDNA and genomic DNA, obtained by cloning or produced by known chemical synthetic techniques or by a combination thereof. The nucleic acid, especially DNA, can be double-stranded or single-stranded. Single-stranded nucleic acid can be the coding strand (sense strand) or the non-coding strand (antisense strand).

15 The invention further utilizes nucleic acid molecules that encode functional fragments or variants of VEGFRKDs. Such nucleic acid molecules may be constructed by known recombinant DNA methods or by chemical synthesis. Such non-naturally occurring variants may be made by mutagenesis techniques, including those applied to nucleic acid molecules, cells, or organisms. Accordingly, the variants can contain nucleotide substitutions, deletions, inversions and insertions. Variation can occur in either or both the coding and non-coding regions. The variations can produce both conservative and non-conservative amino acid substitutions.

20 The nucleic acid molecules utilized in the present invention are useful for producing peptides for use in crystallization studies, drug discovery, and drug design. The nucleic acid molecules can also be used as primers for PCR to amplify any given region of a nucleic acid molecule and are also useful to synthesize antisense molecules of desired length and sequence

25 The nucleic acid molecules are also useful for constructing recombinant vectors. Such vectors include expression vectors that express a portion of, or all of, the peptide sequences. Vectors also include insertion vectors, used to integrate into another nucleic acid molecule sequence, such as into the cellular genome, to alter *in situ* expression of a gene and/or gene product. For example, an endogenous coding sequence can be replaced via homologous recombination with all or part of the coding region containing one or more specifically introduced mutations.

30 The nucleic acid molecules are also useful for constructing host cells expressing a part, or all, of the nucleic acid molecules and peptides.

#### **Vectors and Host Cells**

35 The invention also utilizes vectors containing the nucleic acid molecules described above and, preferably, the modified VEGFR2KD described above and in U.S. Patent No. 6,316,603 (incorporated by reference herein in its entirety).

40 When the vector is a nucleic acid molecule, the nucleic acid molecules are covalently linked to the vector nucleic acid. Exemplary vectors for this embodiment of the invention include plasmids, single- or double-stranded phage, single- or double-stranded RNA or DNA viral vector, or artificial chromosome, such as a BAC, PAC, YAC, or MAC. Various expression vectors can be used to express the polynucleotides of the invention, such as pET and pProEX.

A vector can be maintained in the host cell as an extrachromosomal element where it replicates and produces additional copies of the nucleic acid molecules. Alternatively, the vector may integrate into the host cell genome and produce additional copies of the nucleic acid molecules when the host cell replicates.

5           The vectors can be used for the maintenance (cloning vectors) or expression (expression vectors) of the nucleic acid molecules. The vectors can function in prokaryotic or eukaryotic cells or in both (shuttle vectors).

          Expression vectors contain cis-acting regulatory regions that are operably linked in the vector to the nucleic acid molecules such that transcription of the nucleic acid molecules is allowed in a host  
10   cell. The nucleic acid molecules can be introduced into the host cell with a separate nucleic acid molecule capable of affecting transcription. Thus, the second nucleic acid molecule may provide a trans-acting factor interacting with the cis-regulatory control region to allow transcription of the nucleic acid molecules from the vector. Alternatively, the host cell may supply a trans-acting factor. Finally, a trans-acting factor can be produced from the vector itself. It is understood, however, that in some  
15   embodiments, transcription and/or translation of the nucleic acid molecules can occur in a cell-free system.

          Exemplary regulatory sequences to which the nucleic acid molecules used herein can be operably linked include promoters for directing mRNA transcription. These include the left promoter from bacteriophage  $\lambda$ , the lac promoter, TRP, and TAC promoters from *E. coli*, the early and late  
20   promoters from SV40, the CMV immediate early promoter, the adenovirus early and late promoters, and retrovirus long-terminal repeats.

          The term "operably linked" as used herein indicates that a gene and a regulatory sequence, such as a promoter, are connected in such a way as to permit gene expression when the appropriate molecules (e.g., transcriptional activator proteins or proteins which include transcriptional activation  
25   domains) are bound to the regulatory sequence.

          In addition to control regions that promote transcription, exemplary expression vectors also include regions that modulate transcription, such as repressor binding sites and enhancers. Illustrative embodiments include the SV40 enhancer, the cytomegalovirus immediate early enhancer, polyoma enhancer, adenovirus enhancers, and retrovirus LTR enhancers.

30           In addition to containing sites for transcription initiation and control, exemplary expression vectors can contain sequences necessary for transcription termination. These vectors may also contain signals necessary for translation such as a ribosome-binding site. Other exemplary regulatory control elements for expression include initiation and termination codons as well as polyadenylation signals. Other examples of regulatory sequences are described, for example, in  
35   Sambrook et al., 2001, *supra*.

          A variety of expression vectors can be used to express a nucleic acid molecule. Examples of such vectors include chromosomal, episomal, and virus-derived vectors, for example, vectors derived from bacterial plasmids, from bacteriophage, from yeast episomes, from yeast chromosomal elements, including yeast artificial chromosomes, and from viruses such as baculoviruses,  
40   papovaviruses such as SV40, vaccinia viruses, adenoviruses, poxviruses, pseudorabies viruses, and retroviruses. Vectors may also be derived from combinations of these sources, such as those



derived from plasmid and bacteriophage genetic elements, e.g., cosmids and phagemids. Appropriate cloning and expression vectors for prokaryotic and eukaryotic hosts are described in Sambrook et al., 2001, *supra*.

5 The regulatory sequence may provide constitutive expression in one or more host cells (i.e. tissue specific) or may provide for inducible expression in one or more cell types such as by temperature, nutrient additive, or exogenous factor such as a hormone or other ligand. Suitable vectors providing for constitutive and inducible expression in prokaryotic and eukaryotic hosts are known in the art.

10 The nucleic acid molecules can be inserted into the vector nucleic acid by known methodology. For example, the DNA of interest is joined to a vector by cleaving the DNA sequence and the vector with one or more restriction enzymes and then ligating the fragments together.

The vector containing the appropriate nucleic acid molecule can be introduced into an appropriate host cell for propagation or expression using known techniques. Appropriate bacterial host cells include *E. coli*, *Streptomyces*, and *Salmonella typhimurium*. Appropriate eukaryotic host  
15 cells include yeast, insect cells, animal cells such as COS and CHO, and plant cells.

The peptide as described herein can be expressed as a fusion protein. Fusion vectors can increase the expression of a recombinant protein, increase the solubility of the recombinant protein, and/or aid in the purification of the protein by acting, for example, as a ligand for affinity purification. A proteolytic cleavage site may be introduced at the junction of the fusion moiety so that the desired  
20 peptide can ultimately be separated from the fusion moiety. Exemplary proteolytic enzymes include factor Xa, thrombin, and enterokinase. Illustrative fusion expression vectors include pGEX (Smith et al., *Gene* 67:31-40 (1988)), pET28a (Novagen, Madison, WI), pMAL (New England Biolabs, Beverly, MA), and pRIT5 (Pharmacia, Piscataway, NJ), which fuse glutathione S-transferase (GST), maltose E binding protein, or protein A, respectively, to the target recombinant protein. Examples of suitable  
25 inducible non-fusion *E. coli* expression vectors include pTrc (Amann et al., *Gene* 69:301-315 (1988)) and pET 11d (Studier et al., *Gene Expression Technology: Methods in Enzymology*, 185:60-89 (1990)).

Recombinant protein expression can be maximized in a host bacteria by providing a genetic background wherein the host cell has an impaired capacity to proteolytically cleave the recombinant  
30 protein. (Gottesman, *Gene Expression Technology: Methods in Enzymology*, 185:119-128 (1990)). Alternatively, the sequence of the nucleic acid molecule of interest can be altered to provide preferential codon usage for a specific host cell, for example, *E. coli*. (Wada et al., *Nucleic Acids Res.* 20:2111-2118 (1992)).

The nucleic acid molecules can also be expressed by expression vectors that are operative in  
35 yeast. Examples of vectors for expression in yeast, e.g. *S. cerevisiae*, include pYepSec1 (Baldari, et al., *EMBO J.* 6:229-234 (1987)), pMFa (Kurjan et al., *Cell* 30:933-943 (1982)), pJRY88 (Schultz et al., *Gene* 54:113-123 (1987)), and pYES2 (Invitrogen Corporation, San Diego, CA).

The nucleic acid molecules can also be expressed in insect cells using, for example, baculovirus expression vectors. Exemplary, baculovirus vectors available for expression of proteins  
40 in cultured insect cells (e.g., Sf 9 cells) include the pAc series (Smith et al., *Mol. Cell Biol.* 3:2156-2165 (1983)) and the pVL series (Lucklow et al., *Virology* 170:31-39 (1989)).

The nucleic acid molecules described herein can be expressed in mammalian cells using mammalian expression vectors. Examples of mammalian expression vectors include pCDM8 (Seed, *Nature* 329:840 (1987)) and pMT2PC (Kaufman et al., *EMBO J.* 6:187-195 (1987)).

Expression vectors include, for example, pET28a (Novagen, Madison, WI), pAcSG2 (Pharmingen, San Diego, CA), pProEx (Life Technologies, Gaithersburg, MD) and pFastBac (Life Technologies). Other vectors suitable for maintenance propagation or expression of the nucleic acid molecules described herein are known in the art. For example, suitable vectors and methods for using and propagating vectors are discussed in Sambrook et al., 2001, *supra*.

Exemplary host cells containing the vectors used herein include prokaryotic cells, lower eukaryotic cells such as yeast, other eukaryotic cells such as insect cells, and higher eukaryotic cells such as mammalian cells.

The recombinant host cells are prepared by introducing the vector constructs described herein into the cells by techniques available in the art. These include calcium phosphate transfection, DEAE-dextran-mediated transfection, cationic lipid-mediated transfection, electroporation, transduction, infection, lipofection. See also, Sambrook et al., 2001, *supra*.

The recombinant host cells expressing the peptides described herein have a variety of uses. For example, the cells are useful for producing the polypeptides of the invention, which can be used for crystallography studies, biochemical studies, and drug discovery.

Host cells can contain more than one vector. Thus, different nucleotide sequences can be introduced on different vectors of the same cell. Similarly, the nucleic acid molecules can be introduced either alone or with other nucleic acid molecules that are not related to the nucleic acid molecules, such as those providing trans-acting factors for expression vectors. When more than one vector is introduced into a cell, the vectors can be introduced independently, co-introduced, or joined to the VEGFRKD polynucleotide vector.

In the case of bacteriophage and viral vectors, these can be introduced into cells as packaged or encapsulated virus by standard procedures for infection and transduction. Viral vectors can be replication-competent or replication-defective. In the case in which viral replication is defective, replication will occur in host cells providing functions that complement the defects.

Exemplary vectors include selectable markers that enable the selection of the subpopulation of cells that contain the recombinant vector constructs. The marker can be contained in the same vector that contains the nucleic acid molecules described herein or may be on a separate vector. Exemplary markers include tetracycline or ampicillin-resistance genes for prokaryotic host cells, and dihydrofolate reductase or neomycin resistance for eukaryotic host cells. However, any marker that provides selection for a phenotypic trait may be used.

#### **Peptides, Proteins and Antibodies**

The crystalline structures of the invention comprise the protein construct as described in US 6,316,603 B1 (incorporated herein in its entirety) and McTigue et al., *Structure*, Vol. 7, No. 3, 319-330 (1999). The protein construct, referred to herein as VEGFR2KD (SEQ ID NO: 3), contains the core kinase domain of VEGFR2 (SEQ ID NO: 2), with residues 940-989 of the kinase insert domain of SEQ ID NO: 2, a subdomain not necessary for catalytic phosphotransfer activity, deleted. The kinetic phosphotransfer properties of this protein construct are similar to those of a construct containing the

entire kinase insert domain (See McTigue et al. *Structure*, Vol. 7, No. 3, 319-330 (1999); U.S. Patent No. 6,316,603 B1). The methods used to isolate and purify the VEGFR2KD protein are described in McTigue et al. *Structure*, Vol. 7, No. 3, 319-330 (1999) and U.S. Patent No. 6,316,603 B1 (incorporated herein in their entireties by reference).

5           The following amino acid abbreviations are used herein: a=A =Ala=Alanine; v=V=Val=Valine; l=L=Leu=Leucine;       l=I=Ile=Isoleucine;       p=P=Pro=Proline;       f=F=Phe=Phenylalanine; w=W=Trp=Tryptophan;       m=M=Met=Methionine;       g=G=Gly=Glycine;       s=S=Ser=Serine; t=T=Thr=Threonine;       c=C=Cys=Cysteine;       y=Y=Tyr=Tyrosine;       n=N=Asn=Asparagine; q=Q=Gln=Glutamine;       d=D=Asp=Aspartic Acid;       e=E=Glu=Glutamic Acid;       k=K=Lys=Lysine; 10       r=R=Arg=Arginine; and h=H=His=Histidine.

          As used herein, the term "polypeptide" refers to any peptide comprising two or more amino acids joined to each other by peptide bonds or modified peptide bonds (i.e., peptide isosteres). "Polypeptide" refers to both short chains, generally referred to as peptides, oligopeptides, or oligomers, and to long chains, generally referred to as proteins. The terms "peptide," "polypeptide," 15       and "protein" are used interchangeably herein.

          As used herein, a peptide is said to be "isolated" or "purified" when it is substantially free of cellular material or chemical precursors or other chemicals. The peptides of the present invention can be purified to homogeneity or other degrees of purity. The level of purification will be selected based on the intended use, such that the preparation allows for the desired function of the peptide, 20       even if in the presence of considerable amounts of other components.

          The phrase "substantially free of cellular material" means preparations of the peptide having less than about 30% (by dry weight) other proteins (i.e., contaminating protein). In preferred embodiments, the peptide preparation contains less than about 20% other proteins, more preferably, less than about 10% other proteins, or even more preferably, less than about 5% other proteins. 25       When the peptide is recombinantly produced, it can also be substantially free of culture medium (i.e., culture medium represents less than about 20% of the volume of the protein preparation).

          The phrase "substantially free of chemical precursors or other chemicals" refers to preparations of the peptide in which it is separated from chemical precursors or other chemicals that are involved in its synthesis. The phrase means preparations of the VEGFR polypeptide or VEGFR-related polypeptide having less than about 30% (by dry weight) chemical precursors or other chemicals. In preferred embodiments, the peptide preparations have less than about 20% chemical precursors or other chemicals, more preferably, less than about 10% chemical precursors or other chemicals, and, even more preferably, less than about 5% chemical precursors or other chemicals. 30       

          The isolated VEGFR polypeptides described herein can be purified from cells that have been 35       altered to express the polypeptide (recombination), or synthesized using known protein synthesis techniques. For example, a nucleic acid molecule encoding VEGFR2 may be cloned into an expression vector, the expression vector introduced into host cells, and the protein expressed in the host cells. The protein can then be isolated from the cells by an appropriate purification scheme using standard protein purification techniques.

40       While the polypeptides of the invention can be produced in bacteria, yeast, mammalian cells, and other cells under the control of the appropriate regulatory sequences, cell-free transcription and

translation systems can also be used to produce these proteins using RNA derived from the DNA constructs described herein. Where secretion of the peptide is desired, appropriate secretion signals are incorporated into the vector. The signal sequence can be endogenous or heterologous to the peptides. It is also understood that, depending upon the host cell in recombinant production of the peptides described herein, the peptides can have various glycosylation patterns, depending upon the cell, or non-glycosylated, as when produced in bacteria. In some embodiments, the peptides may contain an initial modified methionine as a result of a host-mediated process.

The present invention also provides the use of variants of the above-described peptides, such as allelic/sequence variants of the peptides, and non-naturally occurring recombinantly derived variants of the peptides. Such variants can be generated using techniques that are known by those skilled in the fields of recombinant nucleic acid technology and protein biochemistry.

Such variants can readily be made or identified using molecular techniques and the sequence information disclosed herein. Further, such variants can readily be distinguished from other peptides based on sequence and/or structural homology to the peptides of the present invention.

To determine the percent identity of two amino acid sequences or two nucleic acid sequences, the sequences are aligned for optimal comparison purposes (e.g., gaps can be introduced in one or both of a first and a second amino acid or nucleic acid sequence for optimal alignment and non-homologous sequences can be disregarded for comparison purposes). In a preferred embodiment, the length of a reference sequence aligned for comparison purposes is at least 30%, preferably 40%, more preferably 50%, even more preferably 60% or more, of the length of the reference sequence. In a preferred embodiment, the length of a reference sequence aligned for comparison purposes is at least 70%, preferably 80%, more preferably 90% or more, of the length of the reference sequence. The amino acid residues or nucleotides at corresponding amino acid positions or nucleotide positions are then compared. When a position in the first sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the second sequence, then the molecules are identical at that position (as used herein amino acid or nucleic acid "identity" is equivalent to amino acid or nucleic acid "homology"). The percent identity between the two sequences is a function of the number of identical positions shared by the sequences, taking into account the number of gaps, and the length of each gap, which need to be introduced for optimal alignment of the two sequences.

The comparison of sequences and determination of percent identity and similarity between two sequences can be accomplished using a mathematical algorithm. (Lesk, ed., "Computational Molecular Biology" (1988) Oxford University Press, New York; Smith, ed., "Biocomputing: Informatics and Genome Projects" (1993) Academic Press, New York ; Griffin et al., eds., "Computer Analysis of Sequence Data, Part 1" (1994) Humana Press, New Jersey; von Heinje, "Sequence Analysis in Molecular Biology" (1987) Academic Press; and Gribskov et al. eds., "Sequence Analysis Primer" (1991) Stockton Press, New York). For example, the percent identity between two amino acid sequences is determined using the Needleman et al. algorithm (*J. Mol. Biol.* 48:444-453 (1970), which has been incorporated into commercially available computer programs, such as GAP in the GCG software package, using either a Blossom 62 matrix or a PAM250 matrix, and a gap weight of

16, 14, 12, 10, 8, 6, or 4 and a length weight of 1, 2, 3, 4, 5, or 6. The percent identity between two nucleotide sequences can also be determined using the commercially available computer programs including the GAP program in the GCG software package (Devereux et al., *Nucleic Acids Res.* 12(1):387 (1984)), the NWS gap DNA CMP matrix and a gap weight of 40, 50, 60, 70, or 80 and a length weight of 1, 2, 3, 4, 5, or 6. The percent identity between two amino acid or nucleotide sequences can be determined using the algorithm of Meyers et al. (CABIOS, 4:11-17 (1989)), which has been incorporated into commercially available computer programs, such as ALIGN (version 2.0), using a PAM120 weight residue table, a gap length penalty of 12 and a gap penalty of 4.

The nucleic acid and protein sequences used in the present invention can further be used as a "query sequence" to perform a search against sequence databases to, for example, identify other family members or related sequences. Such searches can be performed using commercially available search engines, such as the NBLAST and XBLAST programs (version 2.0) of Altschul et al. (*J. Mol. Biol.* 215:403-10 (1990)). Nucleotide searches can be performed with such programs to obtain nucleotide sequences homologous to the nucleic acid molecules of the invention. Protein searches can be performed with such programs to obtain amino acid sequences homologous to the proteins of the invention. To obtain gapped alignments for comparison purposes, Gapped BLAST can be utilized as described in Altschul et al. (*Nucleic Acids Res.* 25(17):3389-3402 (1997)).

Peptides can be routinely identified as having a high degree (significant) of sequence homology/identity to the peptides of the present invention. As used herein, two proteins (or a region of the proteins) have "significant homology" when the amino acid sequences are typically at least about 70-75% homologous. In preferred embodiments, the homology is 80-85%, and more preferably at least about 90-95%. A significantly homologous amino acid sequence will be encoded by a nucleic acid sequence that will hybridize to a peptide encoding nucleic acid molecule under stringent conditions.

Non-naturally occurring variants of the polypeptides used in the present invention can be generated using recombinant techniques. Such variants include deletions, additions and substitutions in the amino acid sequence in the kinase domain. For example, one class of substitutions are conservative amino acid substitutions. Such substitutions are those that substitute a given amino acid in a peptide by another amino acid of like characteristics. Exemplary conservative substitutions are the replacements, one for another, among the aliphatic amino acids (Ala, Val, Leu, and Ile); interchange of amino acids containing a hydroxyl residue (Ser and Thr); exchange of amino acids containing an acidic residue (Asp and Glu); substitution between amino acids containing an amide residue (Asn and Gln); exchange of amino acids containing a basic residue (Lys and Arg); and replacements among amino acids containing an aromatic residue (Phe, Tyr). Guidance concerning which amino acid changes are likely to be phenotypically silent is found in Bowie et al., *Science* 247:1306-1310 (1990).

Variant peptides can be fully functional or may have reduced or decreased activity when compared to the wild-type protein. Fully functional variants may contain conservative variation or variation in non-critical residues or in non-critical regions. Functional variants can also contain substitution of similar amino acids, not affecting function that result in no change or an insignificant

change in function. Alternatively, such substitutions may positively or negatively affect function to some degree.

Exemplary non-functional variants are those having one or more non-conservative amino acid substitutions, deletions, insertions, inversions, or truncations of the particular polypeptide, or a substitution, insertion, inversion, or deletion in a critical residue or critical region of the polypeptide.

Amino acids that affect function can be identified by methods known in the art, such as site-directed mutagenesis or alanine-scanning mutagenesis (Cunningham et al., 1989, *Science* 244:1081-1085). The latter procedure introduces single alanine mutations at every residue in the molecule. The resulting mutant molecules are then tested for biological activity, for example, by measuring enzymatic activity. Sites that are critical for binding can also be determined by structural analysis, such as by X-ray crystallography, nuclear magnetic resonance, or photoaffinity labeling (Smith et al., *J. Mol. Biol.* 224:899-904 (1992); de Vos et al., *Science* 255:306-312 (1992)). Accordingly, the peptides of the present invention also include derivatives or analogs: in which a substituted amino acid residue is not one encoded by the genetic code; in which a substituent group is included; in which the polypeptide is fused with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol); or in which the additional amino acids are fused to the polypeptide, such as a leader or secretory sequence or a sequence for purification of the polypeptide.

The present invention further provides for use of functional, active fragments of the VEGFR2KD. A "fragment" is a variant polypeptide having an amino acid sequence that is entirely the same as part but not all of any amino acid sequence of any polypeptide used in the invention. Fragments may be free-standing or comprised within a larger polypeptide of which they form a part or region; most preferably they are a single continuous region in a single larger polypeptide. As used herein, a "fragment" comprises at least 8 or more contiguous amino acid residues from the protein binding domain. Such fragments can be chosen based on the ability to retain the biological activity of the binding domain or based on the ability to perform a function, e.g., act as an immunogen. Preferred are fragments that are active and that have improved crystallography properties as compared to the modified VEGFR2KD used herein.

Polypeptides may contain amino acids other than the 20 amino acids commonly referred to as the 20 naturally occurring amino acids. Further, many amino acids, including the terminal amino acids, may be modified by natural processes, such as byprocessing and other post-translational modifications, or by chemical modification techniques known in the art. Known modifications include acetylation, acylation, ADP-ribosylation, amidation, covalent attachment of flavin, covalent attachment of a heme moiety, covalent attachment of a nucleotide or nucleotide derivative, covalent attachment of a lipid or lipid derivative, covalent attachment of phosphatidylinositol, cross-linking, cyclization, disulfide bond formation, demethylation, formation of covalent crosslinks, formation of cystine, formation of pyroglutamate, formylation, gamma carboxylation, glycosylation, GPI anchor formation, hydroxylation, iodination, methylation, myristoylation, oxidation, proteolytic processing, phosphorylation, phenylation, racemization, selenoylation, sulfation, transfer-RNA mediated addition of amino acids to proteins such as arginylation, and ubiquitination. Modifications, such as glycosylation, lipid attachment, sulfation, gamma-carboxylation of glutamic acid residues,

hydroxylation and ADP-ribosylation, for instance, are described in most basic texts, such as Creighton, "Proteins-Structure and Molecular Properties," 2nd ed. (1993) W. H. Freeman and Company, New York. Reviews on this subject include Wold, "Posttranslational Covalent Modification of Proteins," Johnson, ed., Academic Press, New York 1-12 (1983); Seifter et al. (*Meth. Enzymol.* 5 182: 626-646 (1990)); and Rattan et al. (*Ann. N.Y. Acad. Sci.* 663:48-62 (1992)).

In some embodiments, the peptides can be attached to heterologous sequences to form chimeric or fusion proteins. Such chimeric and fusion proteins comprise a peptide operatively linked to a heterologous protein having an amino acid sequence not substantially homologous to the VEGFR peptide. "Operatively linked" indicates that the peptide and the heterologous protein are 10 fused in-frame. The heterologous protein can be fused to the N-terminus or C-terminus of the VEGFR peptide. The two peptides linked in a fusion peptide are preferably derived from two independent sources, and therefore such a fusion peptide comprises two linked peptides not normally found linked in nature.

In some embodiments, the fusion protein does not affect the activity of the peptide *per se*. 15 For example, the fusion protein can include, enzymatic fusion proteins or affinity tags, for example, beta-galactosidase fusions, yeast two-hybrid GAL fusions, His-tags, MYC-tags, green fusion protein, and Ig fusions. Such fusion proteins can facilitate the purification of the polypeptides described herein. In certain host cells (e.g., mammalian host cells), expression and/or secretion of a protein can be increased by using a heterologous signal sequence.

A chimeric or fusion protein can be produced by standard recombinant DNA techniques. For example, DNA fragments coding for the different protein sequences are ligated together in-frame in accordance with conventional techniques. In another embodiment, the fusion gene can be synthesized by conventional techniques, including automated DNA synthesizers. Alternatively, PCR 20 amplification of gene fragments can be carried out using anchor primers which give rise to complementary overhangs between two consecutive gene fragments, which can subsequently be annealed and re-amplified to generate a chimeric gene sequence (see Ausubel et al., 1992 *supra*). Moreover, many expression vectors are commercially available that already encode a fusion moiety (e.g., a GST protein, His-tag, or green fluorescent protein). A nucleic acid encoding a VEGFR polypeptide can be cloned into such an expression vector such that the fusion moiety is linked in- 25 frame to the VEGFR polypeptide.

The polypeptides can be used for rapid-screening methods (high-throughput screening) to identify compounds that inhibit or modulate VEGFR activity. The high-throughput screening assay can be fully automated on robotic workstations. The assay may employ radioactivity, fluorescence, or other materials useful for detection.

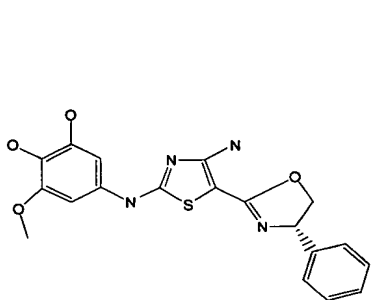
"High-throughput screening" as used herein refers to an assay that provides for multiple-candidate 35 agents or samples to be screened simultaneously. Preferably the number of agents or samples screened is greater than one, more preferably greater than 100, and even more preferably greater than 300. Such assays may include the use of microtiter plates or other vessel containing apparatus that allows a large number of assays to be carried out simultaneously, using small amounts of 40 reagents and samples.

### Crystallization

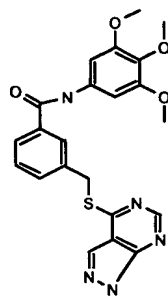
The present invention provides methods for growing mammalian, e.g., human, VEGFRKD crystals, including, but not limited to, unphosphorylated VEGFR2KD: ligand crystalline complexes. Crystals of the VEGFRKD: ligand can be grown by a number of known techniques, including, but not limited to, batch crystallization, vapor diffusion (either by sitting drop or hanging drop), and microdialysis. See, e.g., McPherson, A., Preparation and Analysis of Protein Crystals, Krieger Press (1989). Seeding of the crystals may be required to obtain X-ray quality crystals. If seeding is required, then standard micro and/or macro seeding of crystals may be employed.

Preferably, crystallization is performed by hanging-drop vapor diffusion wherein, for example, a droplet of VEGFR2KD solution is mixed with a droplet of precipitant solution to obtain a mixed droplet solution. The mixed droplet solution is then suspended over a well of precipitant solution in a sealed container. The mixed droplet solution is preferably placed on a glass slide prior to inclusion in the sealed container. In a preferred embodiment, the VEGFR2KD solution is mixed with the precipitant solution in a ratio ranging from about 1:4 to about 4:1, preferably, ranging from about 1:2 to about 2:1 and, even more preferably, of about 1:1. In one embodiment, the mixed droplet may be suspended over a well containing precipitant solution.

The vapor pressure of the precipitant solution in the well must be lower than the vapor pressure of the mixed droplet solution in order for crystals to form. The crystallization temperature may be between about 4°C and about 20°C, and, preferably, is about 4°C. The mixed droplet solution is allowed to stand suspended over the well containing the precipitant solution at the crystallization temperature for a period of about 12 to about 24 hours, preferably, about 12 hours. The seal on the crystallization experiment is then opened and the drop is seeded with micro or macro seeds that are not older than about 28 days. The crystallization experiment is resealed and the crystals are allowed to grow for a period of about 1 to about 4 weeks, preferably until the crystals reach a size appropriate for crystallographic data collection, such as about 0.1 mm x about 0.1 mm x about 0.25 mm. Preferably, the ligand comprises a VEGFRKD modulator (e.g. activity inhibitor or enhancer) which binds to the KD ligand binding pocket. In a preferred embodiment, the ligand is selected from the group consisting of:

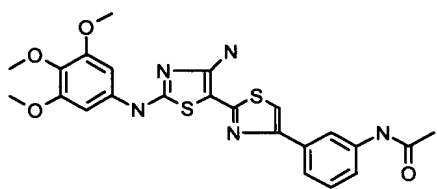


;

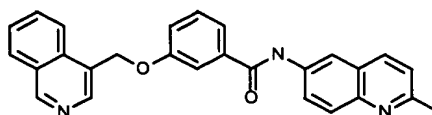


(Compound 1);

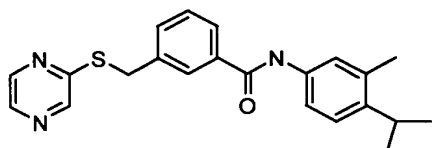




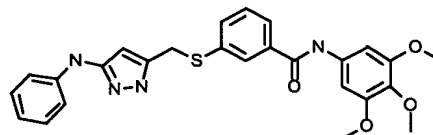
;



;

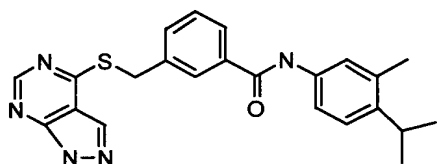


;

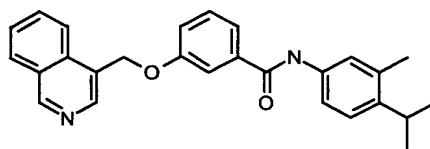


;

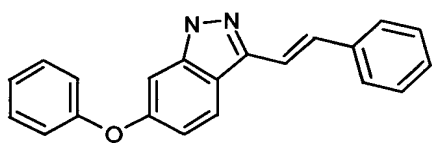
5



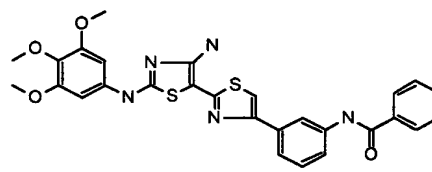
;



;

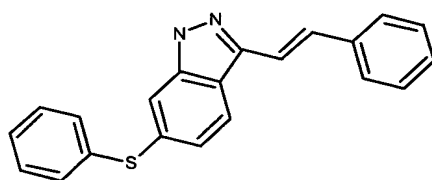


;

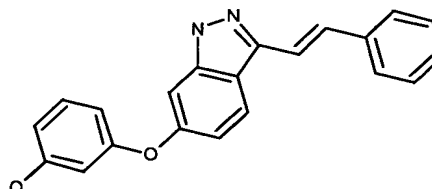


;

10

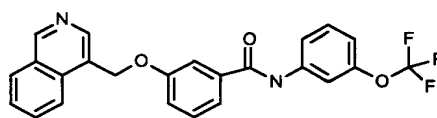


;

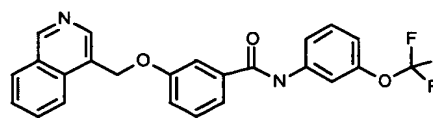


;

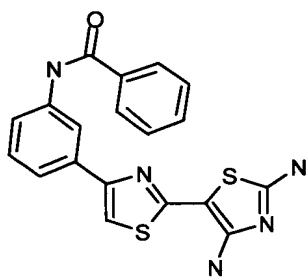
15



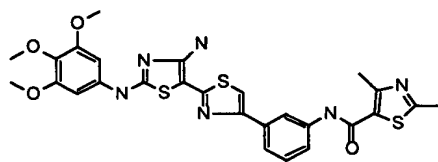
;



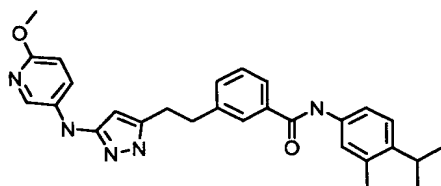
;



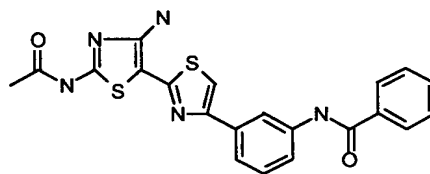
;



(Compound 3);

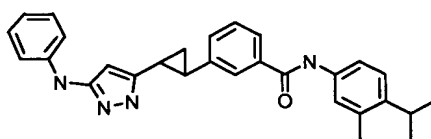


;

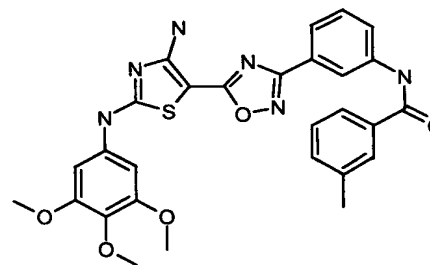


;

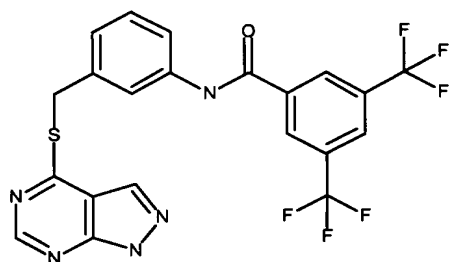
5



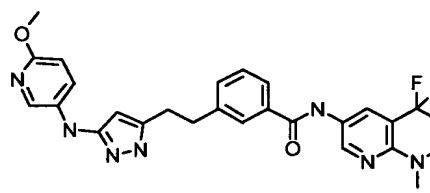
;



;

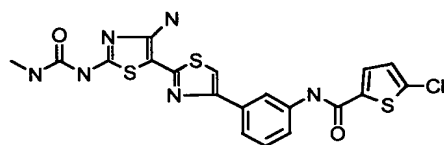


;

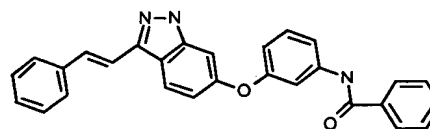


;

10

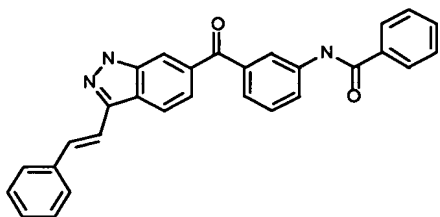


;

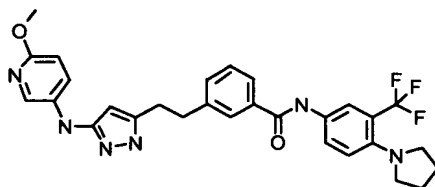


;

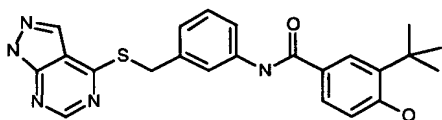
15



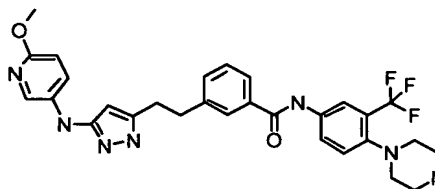
;



;

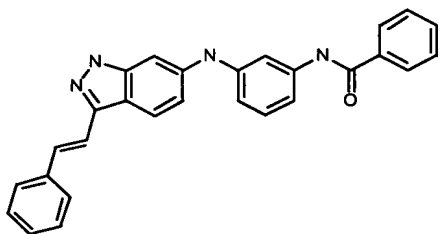


;

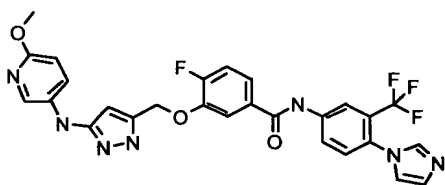


;

5

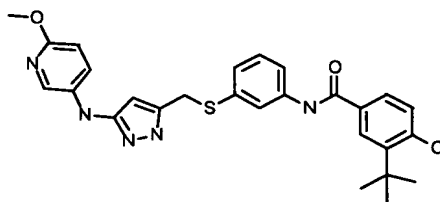


;

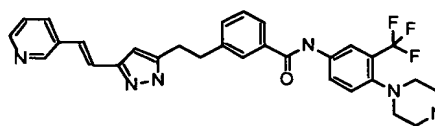


(Compound 4);

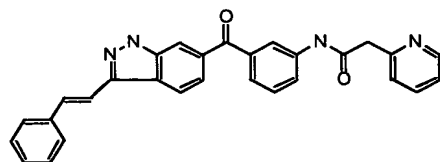
10



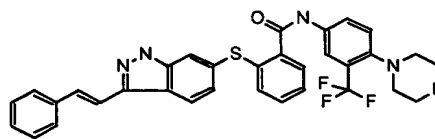
;



;

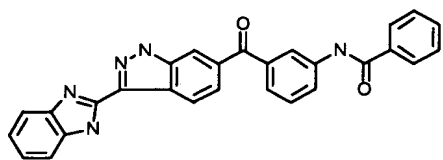


;

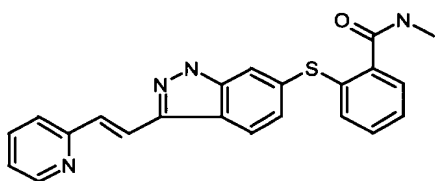


;

15

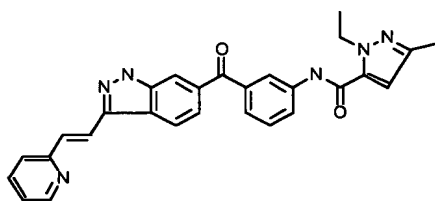


;

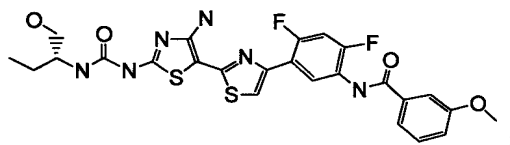


(Compound 2);

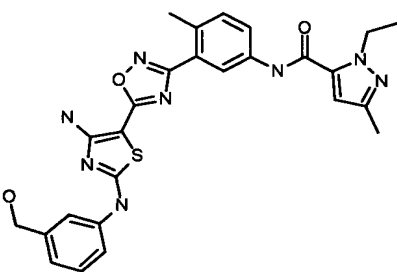
5



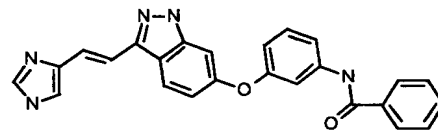
;



;

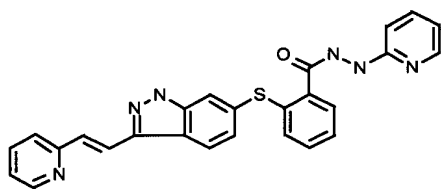


;



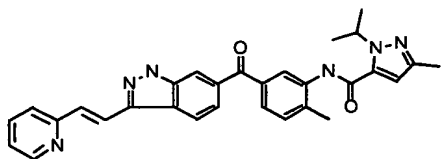
;

10

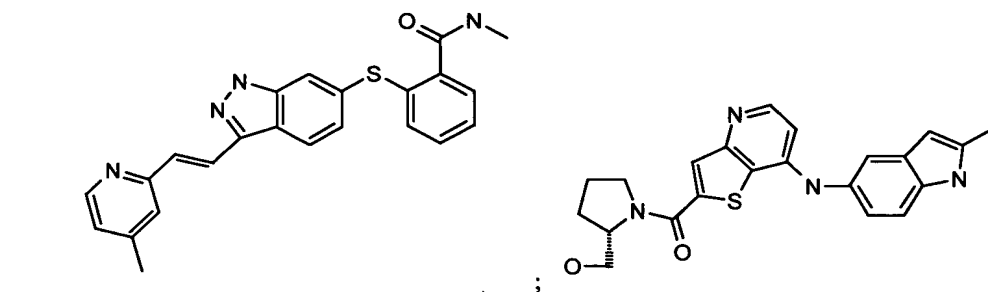
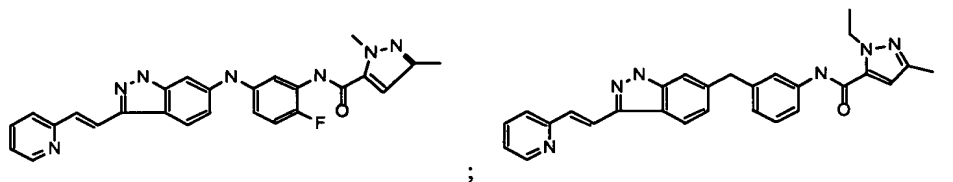


;

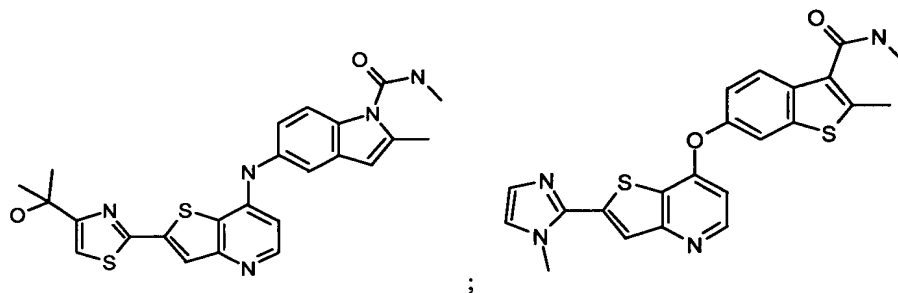
15



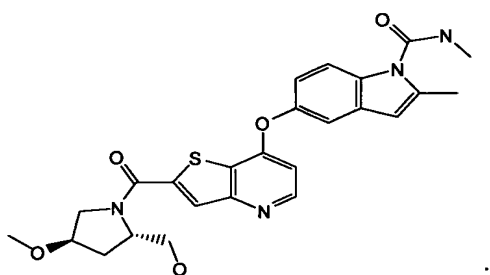
(Compound 5);



5 ;



10 ;



;

15 and mixtures thereof, and compounds related thereto. (See, e.g., WO 01/02359 A2, incorporated herein by reference). The crystalline structures of VEGFR2KD in complex with these ligands are defined by the atomic coordinates set forth in Tables 1, Table 2, Table 3, Table 4, and/or Table 5, or by related structural (e.g. atomic) coordinates having a root mean square deviation of not more than about 1.25 Å from the Cα atoms of the structural coordinates a set forth in Table 1, Table 2, Table 3, 20 Table 4, and/or Table 5.

In a more preferred embodiment, the ligand is Compound 1, Compound 2, Compound 3, Compound 4 or Compound 5.

In the most preferred embodiment, the ligand is Compound 2 ( $K_i = 3.8$  nM, measured using unphosphorylated VEGFR2KD in the coupled Spectrophotometric Enzyme Assay described in Example 6).

5 The VEGFRKD:ligand crystals are harvested and dipped in a cryoprotective solution. The cryoprotective solution comprises components designed to stabilize the formation of a vitreous solid containing the VEGFRKD complex as a crystalline solid at a temperature of about 100°K. The solution is then flash-frozen by immersion in a stream of cold nitrogen at, for example, 100°K. Alternatively, the crystals may be dipped directly into liquid nitrogen or liquid propane.

10 Crystals of the present invention may take a variety of forms, all of which are included in the present invention, such as triclinic, monoclinic, orthorhombic, tetragonal, cubic, trigonal or hexagonal. In a preferred embodiment, the crystals of human VEGFR2KD are monoclinic and possess a space group C2 with unit cell dimensions of approximately:  $a = 136$  Å,  $b = 57$  Å and  $c = 52$  Å,  $\alpha = 90^\circ$ ,  $\beta = 94^\circ$  and  $\gamma = 90^\circ$ .

#### X-Ray Diffraction Data and Structural Analysis

15 Once crystals of the present invention are grown, X-ray diffraction data can be collected. The data collection methods and conditions cited herein are provided to elucidate the approach used for the structural determination of VEGFR2KD peptide complexes. One of ordinary skill in the art would be aware of other methods and conditions that may be suitable for X-ray data collection and structural determination of VEGFR2KD peptide complexes. See, e.g., Glusker, J., Crystal Structure Analysis for Chemists and Biologists, Wiley-VCH Press (1994).

20 Generally, collecting the X-ray diffraction data for the VEGFR2KD peptide complex crystals comprises mounting the crystals in a cryoloop, bathing the crystals in a cryoprotectant solution and rapidly cooling the crystals to about 100 K, followed by collecting diffraction data in the oscillation mode. The source(s) of X-rays includes, but is not limited to, a standard rotating anode home source, such as a Rigaku™ Ru-H3R or Ru-200B generator (Rigaku Corp., Tokyo, Japan), a sealed tube or a synchrotron source, such as a synchrotron provided by, for example, the Stanford University Synchrotron Radiation Laboratory.

30 The method of detecting and quantitating the diffraction data (i.e., diffraction pattern produced by the diffracted X-rays), may be performed using, for example, a standard image plate, such as the R-Axis IV<sup>++</sup> (Rigaku/MSB, Inc., The Woodlands, TX), a MAR300 or MAR345i (MAR Research San Diego, CA) or a charge-coupled device such as the MAR-CCD X-ray detector. The data are generally corrected for Lorentz and polarization effects and converted to indexed structure factor amplitudes using data processing software such as DENZO™, HKL-2000 or SCALEPACK (HKL Research, Inc., Charlottesville, VA) (Otwinowski, Z. *et al.*, *Methods Enzymol.* 276: 307-326 (1997)), d\*Trek (Rigaku/MSB, Inc. (Pflugrath, J.W., *Acta Cryst. D*55: 1718-1725 (1999))), or MOSFILM (Leslie, A.G.W., Joint CCP4 + ESF-EAMCB Newsletter on Protein Crystallography, No. 26 (1992)), or other functionally related computer programs, alone or in combination. The preferred processing software is DENZO™ and/or HKL-2000 (HKL Research, Inc.). In addition, X-PLOR (Brunger, "X-PLOR: A System for X-ray Crystallography and NMR," Yale University Press, New Haven, CT (1992)) or Heavy (Terwilliger, Los Alamos National Laboratory) may be utilized for bulk solvent correction and B-factor scaling.

40

The three-dimensional image generated from the X-ray diffraction data, more specifically, generated from the intensities of the diffracted X-rays, is referred to as an electron density map of the repeating unit of the crystal. However, the electron density map cannot be completely generated until the amplitudes and phases of the diffracted X-rays are known. Amplitudes may be obtained directly from the intensities. Phases may be obtained indirectly by, for example, any one or a combination of the following methods: computational methods, molecular replacement analysis (if a homologous structure is known), heavy atom substitution techniques (e.g., isomorphous replacement), synchrotron radiation at multiple wavelengths, Patterson difference, single-wavelength anomalous scattering, etc. Software that can aid in generating the electron density map includes, but is not limited to, SHARP (Statistical Heavy Atom Refinement and Phasing) (de la Fortelle, E. *et al.*, *Meth. Enzymol.* 276: 472-494 (1997)) and SOLOMON (Abrahams, J.P. *et al.*, *Acta Cryst. D*52: 30-42 (1996)), and other related computer program, alone or in combination. The map may then be used, via model building, to build a model of the protein. A molecular model of the amino acid or nucleotide sequence is then fit into the electron density map and the map is refined. Refinement establishes a set of atomic coordinates representing every non-hydrogen molecule of the enzyme or enzyme complex and results in a three-dimensional structure. Atomic coordinates (also referred to as "structure coordinates," "structural coordinates" and "crystal coordinates") are Cartesian coordinates derived from mathematical equations related to the patterns obtained on diffraction of a monochromatic beam of X-rays by the atoms of a protein or protein complex in crystal form.

Molecular models can be built into the electron density map and refined using, for example, O (Jones *et al.*, *ACTA Crystallogr.* A47:110-119 (1991)), XTALVIEW (Scripps Research, La Jolla, CA), QUANTA98 (Accelrys, Inc., San Diego, CA), GRIN/GRID (Molecular Discovery Ltd., London, England), MolCad (Tripos, Inc.), CHARMM™ (Accelrys Inc.), INSIGHT™-II (Accelrys Inc.), SYBYL™ (Tripos, Inc.), MacroModel™ (Trustees of Columbia Univ., New York, NY), ICM (MolSoft LLC, San Diego, CA), CNX (Accelrys Inc.), CAVEAT (P.A. Bartlett, *et al.*, *Royal Chem. Soc.* 78: 182-196 (1989), available from the University of California, Berkeley, CA), GRASP (A. Nicholls, Columbia University), SiteID (Tripos, Inc.), and/or X-PLOR (Accelrys Inc.), using the free R-value to monitor the course of refinement, or other functionally related computer program. Any of the programs may be used individually or in combination.

The computer software may be used alone or combined with a docking computer program such as GOLD (commercially available via Cambridge Crystallographic Data Centre, Cambridge, UK; Jones, G., *J. Mol. Biol.* 245: 43-53 (1995)), FlexX (Tripos, Inc.), GRAMM (Ilya A. Vakser, Rockefeller Univ.), Flexidock (Tripos, Inc.), Dock (Ewing, T.J.A. *et al.*, *J. Comput.-Aided Mol. Des.* 15: 411-428 (2001)), or AutoDock (Molecular Graphics Laboratory (Scripps Research Inst.); Goodsell, D.S., *J. Mol. Recognit.* 9: 1-5 (1996)), or other functionally related computer program. These docking computer programs scan known databases of small molecules to find core compounds that roughly fit the binding sites. Any of the programs may be used alone or in combination.

If necessary, the three-dimensional structure may be "cleaned up" by modifying the atom types of the ligand, if present, and any water molecules that are present so that the water molecules find their lowest energy rotamer (i.e., are rotated to provide optimal interactions with the protein). The software may also be used to add hydrogens in standardized geometry (i.e., most favorable

protonation state) with optimization of orientations of OH, SH,  $\text{NH}_3^+$ , Met methyls, Asn and Gln sidechain amides, and His rings. Suitable software for performing this "clean up" includes, but is not limited to, SYBYL™ (Tripos, Inc.), WHATCHECK (part of CCP4 suite, COLLABORATIVE COMPUTATIONAL PROJECT, No. 4, *Acta Cryst. D50*: 760-763 (1994)), REDUCE (Word *et al.*, *J. Mol. Bio.* 285: 1733-45 (1999)), and other functionally related computer programs. Any suitable docking computer program may be used to further validate the refined peptide crystal structure. Any of the programs may be used alone or in combination.

### Three-Dimensional Structure of VEGFR2KD

Analogous to previously reported structures of both serine/threonine and tyrosine protein kinases, it has been discovered that the liganded, phosphorylated VEGFR2KD of the invention is folded into two domains with catalysis of phosphotransfer taking place in a cleft between the two lobes (See, e.g., the reported kinase structures found in Knighton, D.R. *et al.*, *Science* 253: 407-413 (1991); Johnson, L.N. *et al.*, *Cell* 85: 149-158 (1996); Hubbard, S.R. *et al.*, *Nature* 372: 746-754 (1994)). The N-terminal lobe (approximately residues 810-920 of SEQ ID NO: 2) folds into a twisted beta sheet with one  $\alpha$  elix ( $\alpha$ C). The larger C-terminal domain (approximately residues 921-1168 of SEQ ID NO: 2) contains two beta strands, which lie at the top of the C-terminal domain adjacent to the N-terminal beta-sheet, and seven  $\alpha$  helices. Like other protein kinases, VEGFR2KD contains functionally important loop regions: the glycine-rich nucleotide binding loop (approximately residues 840-848 of SEQ ID NO: 2, the catalytic loop (approximately residues 1026-1033 of SEQ ID NO: 2), and the activation loop (approximately residues 1046-1075 of SEQ ID NO: 2).

Through analysis of the crystalline structures of VEGFR2KD in complex with structurally diverse Compounds 3, 4, and 5, it has been discovered that the VEGFR2KD: ligand complexes of the invention comprise a ligand binding pocket that differs substantially from the unliganded, phosphorylated VEGFR2KD structure previously reported. Particularly, the structure of the VEGFR2KD: ligand complexes defines a unique ligand binding pocket of approximate dimensions 12 Å x 9 Å x 25 Å. Depictions of the VEGFR2KD ligand-binding pocket are shown in Figures 1, 2A, and 2B. The ligand binding pocket lies in the cleft between the N-terminal and C-terminal domains of the kinase of SEQ ID NO: 2. Using the program Insight II version 98.0 (Molecular Simulations Incorporated, San Diego, CA), it has been discovered that VEGFR2KD comprises a ligand binding pocket that is defined by the structural coordinates of the following amino acid residues: L840, V848, E850, A866, V867, K868, E885, I888, L889, I892, V898, V899, V914, V916, E917, F918, K920, F921, N923, L1019, C1024, I1025, H1026, L1035, I1044, C1045, D1046, and F1047 of SEQ ID NO: 2 or a conservatively substituted variant thereof.

A binding pocket defined by the atomic coordinates of the amino acids, as set forth in Table 1, Table 2, Table 3, Table 4, and/or Table 5, or a binding pocket whose root mean square deviation from the atomic coordinates of the backbone atoms of these amino acids that is not more than about 0.90 Å, is a binding pocket of a VEGFRKD or of a protein structurally related thereto. Preferably the root mean square deviation is not more than about 0.75 Å. More preferably, the root mean square deviation is not more than about 0.90 Å.

It has also been discovered that the kinase activation loop of the VEGFR2KD: ligand complexes of the invention is folded in a unique conformation that creates a deep crevice and which



makes specific packing and electrostatic interactions with ligands (e.g. inhibitors). As shown in Figure 1, the loop starts after beta strand 8 in the cleft between the two domains and follows a path that first extends (residues 1046 through 1050 of SEQ ID NO: 2) towards the N-terminal domain, then turns (residues 1050 through 1053 of SEQ ID NO: 2) towards the C-terminal domain, forms another turn (residues 1053 through 1059 of SEQ ID NO: 2), extends in a short B-strand out towards solvent (residues 1059 through 1062 of SEQ ID NO: 2), makes a turn (residues 1062 through 1065 of SEQ ID NO: 2), forms another short B-strand (residues 1065 through 1068 of SEQ ID NO: 2) that goes back in towards the protein C-terminal domain, and forms a short loop (residues 1069 through 1075 of SEQ ID NO: 2) that connects with  $\alpha$  helix EF.

For protein kinases in general, in the activated (usually phosphorylated) form, this loop adopts an "open" conformation that permits the catalytically competent binding of Mg-ATP and substrates. In the non-activated form, generally non-phosphorylated, many different conformations of this loop have been reported for various kinases (reviewed in Johnson, L.N. *et al.*, *Cell* 85: 149-158 (1996)). The conformation observed in the structures of unphosphorylated VEGFR2KD bound to ligands is unique to those already described. In the published structure of the unliganded, phosphorylated VEGFR2KD a conformation for most of the activation loop (residues 1048-1063 SEQ ID NO: 2) could not be modeled due to a lack of interpretable electron density, most likely caused by dynamic disorder. By comparison, in the unphosphorylated VEGFRKD: ligand complexes of the invention, amino acid residues 1046-1060 of SEQ ID NO: 2 are well-ordered and adopt a conformation that is unique to those published for other protein kinases.

In the VEGFR2KD structures, the sidechains of Cys1045 and Phe1047 point in towards the ligand binding cavity and the shape and electronic features of these amino acid residues primarily determine this portion of the binding site. The phenyl ring of Phe1047 makes aromatic and hydrophobic interactions with ligands bound at this site, and a large sulfhydryl of Cys1045 occupies space not occupied in known structures. These differences substantially affect the shape and chemical nature of this portion of the ligand binding site.

It will be readily apparent to those of skill in the art that the numbering of amino acids in structurally related forms of VEGFRKD may be different than that set forth herein. Corresponding amino acids in other forms are readily identified by inspection of the amino acid sequences, for example, through the use of commercially available homology software programs as described above.

The amino acids of the VEGFRKD, and subsets thereof, including the ligand binding pocket, of the invention are described herein in reference to the set of structure/atomic coordinates set forth in Tables 1, 2, 3, 4 and/or 5. The terms "structure coordinates" (or structural coordinates) and "atomic coordinates" refer to Cartesian coordinates derived from mathematical equations related to the patterns obtained on diffraction of a monochromatic beam of X-rays by the atoms (scattering centers) of a protein or protein-ligand complex in crystal form. The diffraction data are used to calculate an electron density map of the repeating unit of the crystal. The electron density maps are then used to establish the positions of the individual atoms of the enzyme or enzyme complex.

The variations in coordinates discussed above may be generated because of mathematical manipulations of the VEGFRKD crystal complex structure coordinates. For example, the structure

coordinates set forth in Table 1, Table 2, Table 3, Table 4, or Table 5 may be manipulated by crystallographic permutations of the structure coordinates, fractionalization of the structure coordinates, integer additions, subtractions to sets of the structure coordinates, coordinate transformations, e.g., translation or rotation, or combinations thereof.

5 Alternatively, modifications in the crystal structure due to mutations, additions, substitutions, and/or deletions of amino acids, or other changes in any of the components that make up the crystal may also account for variations in structure coordinates. If such variations are within an acceptable standard error as compared to the original coordinates, the resulting three-dimensional shape is considered to be the same. Thus, for example, a ligand that binds to a VEGFR2KD ligand binding  
10 pocket would also be expected to bind to a binding pocket whose atomic coordinates, when compared to those described herein, have a RMS deviation of not more than about 0.90 Å, preferably not more than about 0.90 Å, more preferably not more than about 0.75 Å, and most preferably not more than about 0.60 Å, from the backbone atoms.

Various computational analyses can be performed to determine whether a polypeptide or the  
15 binding pocket portion thereof is sufficiently similar to the VEGFR binding pocket as described herein. Such analyses may be carried out through the use of known software applications, such as the MODELLER module of INSIGHT II (Accelrys, Inc., San Diego, CA), ProMod (University of Geneva, Switzerland), SWISS-MODEL (Swiss Institute of Bioinformatics), and the Molecular Similarity application of QUANTA (Accelrys, Inc., San Diego, CA).

20 Programs such as QUANTA (Accelrys, Inc., San Diego, CA), INSIGHT II (Accelrys, Inc., San Diego, CA), Maestro (Schrödinger, Portland, OR), SYBYL (Tripos, Inc., St. Louis, MO), and MacroModel (Schrödinger, Portland, OR) permit comparisons between different structures, different conformations of the same structure, and different parts of the same structure. Comparison of structures using such computer software may involve the following steps: 1) loading the structures to  
25 be compared; 2) defining the atom equivalencies in the structures; 3) performing a fitting operation; and 4) analyzing the results.

In comparing structures, each structure is identified by a name. One structure is identified as the target (i.e., the fixed structure); all remaining structures are working structures (i.e., moving structures). Since atom equivalency with QUANTA is defined by user input, as defined herein  
30 "equivalent atoms" refers to protein backbone atoms (N, C $\alpha$ , C, and O) for all conserved residues between the two structures being compared.

When a rigid-fitting method is used, the working structure is translated and rotated to obtain an optimum fit with the target structure. The fitting operation uses an algorithm that computes the optimum translation and rotation to be applied to the moving structure, such that the root-mean-square difference of the fit over the specified pairs of equivalent atoms is an absolute minimum. This  
35 number, given in angstroms (Å), is reported by software applications such as QUANTA (Accelrys, Inc., San Diego, CA) or other similar programs. Any molecule or molecular complex or binding pocket thereof that has a root-mean-square deviation of conserved residue backbone atoms (N, C $\alpha$ , C, O) of less than about 0.5 Å when superimposed on the relevant backbone atoms described by  
40 structure coordinates listed in any one of Tables 1-5 are considered identical.

The atomic coordinates and thus, three-dimensional structure, may also be used in homology modeling or NMR spectroscopy for drug design, for example, as described below.

#### **Computers and Computer Software**

Once the atomic coordinates are known, a computer may be used for producing a three-dimensional representation of the VEGFRKD, a structurally related peptide, or a VEGFRKD or VEGFRKD-like ligand binding pocket. Thus, the invention relates to a method for generating a three-dimensional computer representation of a molecule comprising VEGFRKD, or a peptide that is structurally related thereto, comprising applying the atomic coordinates set forth in Table 1, Table 2, Table 3, Table 4, or Table 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 1.25 Å away from the core Cα atoms of the atomic coordinates as set forth in Table 1, Table 2, Table 3, Table 4, or Table 5, to a computer algorithm to generate a three-dimensional representation of the molecule.

Similarly, the invention includes a method for generating a three-dimensional computer representation of a VEGFRKD or VEGFRKD-like ligand binding pocket comprising applying the atomic coordinates set forth in Table 1, Table 2, Table 3, Table 4, or Table 5, or a related set of atomic coordinates having a root mean square deviation of not more than about 0.90 Å away from the core Cα atoms of the atomic coordinates as set forth in Table 1, Table 2, Table 3, Table 4, or Table 5, to a computer algorithm to generate a three-dimensional representation of the binding pocket. In one embodiment, the binding is defined by the structural coordinates of the following amino acid residues: L840, V848, E850, A866, V867, K868, E885, I888, L889, I892, V898, V899, V914, V916, E917, F918, K920, F921, N923, L1019, C1024, I1025, H1026, L1035, I1044, C1045, D1046, and F1047 of SEQ ID NO: 2 or a conservatively substituted variant thereof.

This is achieved through the use of commercially available software that is capable of generating three-dimensional graphical representations of molecules or portions thereof from a set of atomic coordinates.

Suitable computers are known in the art and typically include a central processing unit (CPU) and a working memory, which can be random-access memory, core memory, mass-storage memory, or a combination thereof. The CPU may encode one or more programs. Computers also typically include display, input and output devices, such as one or more cathode-ray tube display terminals, keyboards, modems, input lines and output lines. Further, computers may be networked to computer servers (the machine on which large calculations can be run in batch) and file servers (the main machine for all the centralized databases).

Machine-readable media containing data, such as the crystal atomic coordinates of the polypeptides, may be inputted using various hardware, including, but not limited to, modems, CD-ROM drives, disk drives, or keyboards.

Machine-readable data medium can be, for example, a floppy diskette, hard disk, or an optically-readable data storage medium, which can be either read only memory, or rewritable, such as a magneto-optical disk.

Output hardware, such as a CRT display terminal, may be used for displaying a graphical representation of the ligand-binding pocket of the VEGFRKD polypeptides described herein. Output hardware may also include a printer and disk drives.

The CPU coordinates the use of the various input and output devices, coordinates data access from storage and access to and from working memory, and determines the sequence of data processing steps. A number of programs may be used to process the machine-readable data. Such programs are discussed herein in reference to the computational methods of drug discovery.

## 5       **Drug Design and Computer Modeling**

Once the three-dimensional structure of a crystal comprising a unphosphorylated VEGFRKD: ligand complex is determined, a chemical entity (e.g. a potential inhibitor or enhancer), may be computationally evaluated for its ability to associate with VEGFRKD, a structurally related peptide, or a VEGFRKD or VEGFRKD-like binding pocket. The chemical entity may be computationally  
10       evaluated using a docking program, such as FlexiDock (Tripos, St. Louis, MO), GRAM (Medical Univ. of South Carolina), DOCK (Univ. of California at San Francisco), Glide (Schrödinger, Portland, OR), Gold (Cambridge Crystallographic Data Centre, UK), FlexX (BioSolveIT GmbH, Germany), AGDOCK (Gehlhaar *et al.*, *Chemistry & Biol.* 2:317-324 (1995); Bouzida *et al.*, *Pacific Symp. on Biocomputing* 99: 426-437 (1999); Bouzida *et al.*, *Internat. J of Quantum Chem.* 72:73-84 (1999); Gehlhaar *et al.*,  
15       *Proceedings of the Seventh Ann. Conf. on Evolutionary Programming*, The MIT Press, Cambridge, MA (1998)), Hex (Ritchie *et al.*, *Proteins: Struct. Funct. & Genet.* 39:178-194 (2000)), or AUTODOCK (Scripps Research Institute, La Jolla, CA). The modeling procedure can include computer fitting of potential ligands to the VEGFRKD or VEGFRKD-like ligand-binding pocket to ascertain how well the shape and the chemical structure of the potential ligand will complement or interfere with the ligand-  
20       binding pocket (Bugg *et al.*, *Scientific American Dec.*:92-98 (1993); West *et al.*, *TIPS* 16:67-74 (1995)).

Compounds that bind to a VEGFRKD or VEGFRKD-like ligand-binding pocket may also be designed. The design process involves the consideration of at least two factors. First, the entity must be capable of physically and structurally associating with some of or the entire ligand-binding pocket.  
25       The phrase "associating with" refers to a condition of proximity between a chemical entity and a binding pocket on a protein. The association may be non-covalent, for example, wherein the juxtaposition is energetically favored by hydrogen bonding or van der Waals or electrostatic interactions, or it may be covalent. Non-covalent molecular interactions contributing to this association include, but are not limited to, hydrogen bonding, van der Waals interactions, hydrophobic  
30       interactions, and electrostatic interactions.

Second, the entity must be able to assume a conformation that allows it to associate with the VEGFRKD or VEGFRKD-like ligand-binding pocket directly. Although certain portions of the entity will not directly participate in these associations, those portions of the entity may still influence the overall conformation of the molecule. This, in turn, may have a significant impact on potency.  
35       Conformational requirements include, but are not limited to, the overall three-dimensional structure and orientation of the chemical entity in relation to all or a portion of the binding pocket, and the spacing between functional groups of an entity comprising several chemical entities that directly interact with the ligand binding pocket.

The potential modulatory effect or binding ability of a chemical entity on a VEGFRKD or  
40       VEGFRKD-like ligand-binding pocket may be analyzed prior to its actual synthesis and testing through the use of computer-modeling techniques. If, from the theoretical structure of the given

entity, it can be surmised that there is insufficient interaction and association between it and the ligand binding pocket, further testing of the entity may not be prudent. However, if computer modeling indicates a strong interaction, then the molecule can be synthesized and tested for its ability to bind to a VEGFRKD or VEGFRKD-like ligand binding pocket. This may be achieved by testing the ability of the molecule to modulate VEGFRKD activity using the assays described in U.S. Patent No. 6,316,603. Using this scheme, the fruitless synthesis of compounds with poor binding activities may be avoided.

A potential inhibitor of a VEGFR, or structurally related peptide, may be computationally evaluated by means of a series of steps in which chemical entities are screened and selected for their ability to associate with a VEGFRKD or VEGFRKD-like ligand binding pocket. One skilled in the art may use one of several methods to screen chemical entities or fragments for their ability to associate with a VEGFRKD or VEGFRKD-like ligand-binding pocket. For example, the artisan may visually inspect a VEGFRKD or VEGFRKD-like ligand-binding pocket on a computer screen based on the atomic coordinates reported in Table 1, Table 2, Table 3, Table 4, or Table 5, or a portion thereof, or coordinates that define a similar shape generated from the machine-readable storage medium. Selected chemical entities may then be positioned in a variety of orientations, or docked, within that binding pocket as described herein. Docking may be accomplished using software, such as Quanta (Accelrys, Inc., San Diego, CA) or SYBYL (Tripos, Inc., St. Louis, MO), followed by energy minimization and molecular dynamics with standard molecular mechanics force fields, such as CHARMM (Department of Chemistry & Chemical Biology, Harvard Univ., Cambridge, MA) or AMBER (School of Pharmacy, Department of Pharmaceutical Chemistry, University of California at San Francisco, CA).

Specialized computer programs to assist in the process of selecting chemical entities include, but are not limited to, those described in the following references, which are incorporated by reference herein:

1. GRID (Goodford, *J. Med. Chem.* 28:849-857 (1985)). GRID is available from the Oxford University, Oxford, UK.
2. MCSS (Miranker *et al.*, *Proteins: Struct. Funct. and Genet.* 11:29-34 (1991)). MCSS is available from Accelrys, Inc., San Diego, CA.
3. AUTODOCK (Goodsell *et al.*, *Proteins: Struct. Funct. and Genet.* 8:195-20 (1990)). AUTODOCK is available from the Scripps Research Institute, La Jolla, Calif.
4. DOCK (Kuntz *et al.*, *J. Mol. Biol.* 161:269-288 (1982)). DOCK is available from the University of California, San Francisco, CA.
5. GOLD (Jones *et al.*, *J. Mol. Biol.* 267:727-748 (1997)). GOLD is available from the Cambridge Crystallographic Data Centre, UK.
6. GLIDE (Eldridge *et al.*, *J. Comput. Aided Mol. Des.* 11:425-445 (1997)). Glide is available from Schrödinger, Portland OR.

Once suitable chemical entities have been selected, they can be assembled into a single compound or complex. Assembly may be preceded by visual inspection of the relationship of the fragments to each other on the three-dimensional image displayed on a computer screen in relation to the atomic coordinates set forth in Table 1, Table 2, Table 3, Table 4, or Table 5, or a portion

thereof. This can be followed by manual model building using software such as QUANTA or SYBYL. Useful programs to aid one of skill in the art in connecting the individual chemical entities include, but are not limited to, those described in the following references, which are incorporated by reference herein:

- 5           1. CAVEAT (Bartlett *et al.*, *Molecular Recognition in Chemical and Biological Problems*, Special Pub., Royal Chem. Soc., 78, pp. 182-196 (1989); Lauri *et al.*, *J. Comput. Aided Mol. Des.* 8:51-66 (1994)). CAVEAT is available from the University of California, Berkeley, CA.
2. ISIS: See Martin, *J. Med. Chem.* 35:2145-2154 (1992)). ISIS is available from MDL Information Systems, San Leandro, CA.
- 10          3. HOOK (Eisen *et al.*, *Proteins: Struct., Funct., Genet.* 19:199-221 (1994)). HOOK is available from Accelrys, Inc., San Diego, CA.

Instead of proceeding to build an inhibitor of a VEGFR, or a structurally related peptide, in a step-wise fashion one chemical entity at a time, as described above, modulatory compounds may be designed as a whole or *de novo* using either an empty binding site or, optionally, including some portion(s) of a known modulator. There are many known *de novo* ligand design methods, such as LeapFrog (available from Tripos Associates, St. Louis, MO.) and those discussed in the following references, which are incorporated by reference herein.

1. LUDI (Bohm, *J. Comp. Aid. Molec. Design.* 6:61-78 (1992)). LUDI is available from Accelrys Inc., San Diego, CA.
- 20          2. SPROUT (Gillet *et al.*, *J. Comput. Aided Mol. Design.* 7:127-153 (1993)). SPROUT is available from the University of Leeds, UK.

Other molecular modeling techniques may also be employed, such as those described in Cohen *et al.*, *J. Med. Chem.* 33:883-894 (1990); Navia *et al.*, *Curr. Opin. Struct. Biol.* 2:202-210 (1992); Balbes *et al.*, *Reviews in Computational Chemistry*, Vol. 5, K. Lipkowitz *et al.*, eds., VCH, New York, NY, pp. 337-380 (1994); or Guida, *Curr. Opin. Struct. Biol.* 4:777-781 (1994).

Once a chemical entity has been designed or selected by using such methods, or functionally similar methods, the efficiency with which that entity binds to a VEGFRKD or VEGFRKD-like ligand-binding pocket may be tested and optimized by computational evaluation. For example, an effective VEGFR modulator preferably demonstrates a relatively small difference in energy between its bound and free states (i.e., a small deformation energy of binding). VEGFR modulators may interact with the KD ligand-binding pocket in more than one conformation that is similar in overall binding energy. In those cases, the deformation energy of binding is taken to be the difference between the energy of the free entity and the average energy of the conformations observed when the inhibitor binds to the protein.

35           An entity designed or selected as binding to a VEGFRKD or VEGFRKD-like ligand-binding pocket may be further computationally optimized so that, in its bound state, it would preferably lack repulsive electrostatic interaction with the target kinase and with the surrounding water molecules. Such non-complementary electrostatic interactions include, but are not limited to, repulsive charge-charge, dipole-dipole and charge-dipole interactions.

40           Suitable computer software is available to evaluate compound deformation energy and electrostatic interactions. Examples of programs designed for such uses include, but are not limited

to, Gaussian (Frisch, Gaussian, Inc., Carnegie, PA), AMBER (Kollman, University of California at San Francisco), Jaguar (Schrödinger, Portland, OR); SPARTAN (Wavefunction, Inc., Irvine, CA), QUANTA/CHARMM (Accelrys, Inc., San Diego, CA), Impact (Schrödinger, Portland, OR), Insight II/Discover (Accelrys, Inc., San Diego, CA), MacroModel (Schrödinger, Portland, OR), Maestro  
5 (Schrödinger, Portland, OR), DelPhi (Accelrys, Inc., San Diego, CA), and AMSOL (Quantum Chemistry Program Exchange, Indiana University). These programs may be implemented, for instance, using workstations produced by companies, such as Silicone Graphics, Hewlett Packard, Sun Microsystems, and International Business Machines.

In another approach, small-molecule databases are computationally screened to determine  
10 their potential to bind in whole, or in part, to a VEGFRKD or VEGFRKD-like ligand-binding pocket. Computer programs can be employed to estimate the attraction, repulsion, and steric hindrance of the ligand to the binding pocket. For example, one can screen computationally small molecule databases for chemical entities or compounds that can bind in whole, or in part, to VEGFRKD. In this screening,  
15 the quality of fit of such entities or compounds to the binding site may be judged either by shape complementarity or by estimated interaction energy (Meng *et al.*, *J. Comp. Chem.*, 13:505-524 (1992)). Generally, the tighter the fit (e.g., the lower the steric hindrance and/or the greater the attractive force), the more potent the drug is projected to be since these properties are consistent with a tighter-binding constant.

Initially, a potential ligand can be obtained by screening a random chemical library. A ligand  
20 selected in this manner could be then be systematically modified by computer-modeling programs until one or more promising potential ligands are identified. Such analysis has been shown to be useful in the design of, for example, HIV protease inhibitors (Lam *et al.*, *Science* 263:380-384 (1994); Wlodawer *et al.*, *Ann. Rev. Biochem.* 62:543-585 (1993); Appelt, *Perspectives in Drug Discovery and Design* 1:23-48 (1993); Erickson, *Perspectives in Drug Discovery and Design* 1:109-128 (1993)).  
25 Such computer modeling allows the selection of a finite number of rational chemical modifications, as opposed to the potentially unlimited number of essentially random chemical modifications that could be made, any one of which might lead to a drug. Each chemical modification requires additional chemical steps, which, while being reasonable for the synthesis of a finite number of compounds, quickly becomes overwhelming if all possible modifications needed to be synthesized. Thus, through  
30 the use of the atomic coordinates disclosed herein and computer modeling, a large number of these compounds can be rapidly modeled *via* a computer, and a few promising candidates can be determined without the laborious synthesis of a multitude of compounds.

Once a potential ligand (agonist or antagonist) is identified, it can be either selected from commercial libraries of compounds or, alternatively, the potential ligand may be synthesized *de novo*.  
35 The prospective drug can be tested in inhibitor assays such as those described, for example, in U.S. Patent No. 6,316,603 and Example 6 to test its ability to bind to the VEGFRKD or VEGFRKD-like ligand-binding pocket, and to modulate VEGFR kinase activity.

When a suitable compound is identified, supplemental crystals may be grown comprising a protein-ligand complex of a VEGFR and a ligand or a VEGFRKD and a ligand. Preferably, the  
40 crystals effectively diffract X-rays allowing for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than or equal to about 3.0 Å, more preferably,

greater than or equal to about 2.0 Å. Molecular Replacement, described below, or a functionally similar technique, can be used to determine the three-dimensional structure of the supplemental crystals using the atomic coordinates set forth in Table 1, Table 2, Table 3, Table 4, and/or Table 5.

Thus, the structure coordinates set forth in Table 1, Table 2, Table 3, Table 4, and/or Table 5 can also be used to obtain structural information about another crystallized molecule or molecular complex. This may be achieved by any suitable known technique, such as molecular replacement. By using molecular replacement, all or part of the structure coordinates of the VEGFR crystal complexes of the invention can be used to determine the structure of a crystallized molecule or molecular complex whose structure is unknown. This process is more efficient than attempting to determine such information *ab initio*.

Molecular replacement provides an accurate estimation of the phases for an unknown structure. Phases constitute a factor in equations used to solve crystal structures that cannot be determined directly. Obtaining accurate values for the phases, by methods other than molecular replacement, is a time-consuming process that involves iterative cycles of approximations and refinements and greatly hinders the solution of crystal structures. However, when the crystal structure of a protein containing at least a homologous portion has been solved, the phases from the known structure can provide an estimate of the phases for the unknown structure.

Molecular replacement involves generating a preliminary model of a molecule or molecular complex whose structure coordinates are unknown, by orienting and positioning the relevant portion of the VEGFR crystal complex according to any one of Tables 1-5 within the unit cell of the crystal of the unknown molecule or molecular complex so as best to theoretically account for the observed X-ray diffraction data of the crystal of the molecule or molecular complex whose structure is unknown. Phases can then be calculated from this model and combined with the observed X-ray diffraction data amplitudes to generate an electron density map of the structure whose coordinates are unknown. This, in turn, can be subjected to any known model building and structure refinement techniques to provide a final, accurate structure of the unknown crystallized molecule or molecular complex (See, e.g., Lattman, *Meth. Enzymol.* 115:55-77 (1985); Rossmann, ed., "The Molecular Replacement Method," *Int. Sci. Rev. Ser.*, No. 13, Gordon & Breach, New York (1972)). Thus, the structure of any portion of any crystallized molecule or molecular complex that is sufficiently homologous to any portion of the VEGFR complex can be resolved by this method.

Computer programs that can be used for this purpose include, but are not limited to, those described in the following references, which are incorporated by reference herein:

1. X-PLOR (Brunger, "X-PLOR: A System for X-ray Crystallography and NMR," Yale University Press, New Haven, CT (1992)). X-PLOR is commercially available from Accelrys, Inc., San Diego, CA;
2. EPMR (Kissinger *et al.*, *Acta Cryst. D*55:484-491 (1999));
3. AMORE (Navaza, J., *Acta Crystallographica ASO*, 157-163 (1994)). AMORE is commercially available from Collaborative Computing Project #4 (CCP4), Danesbury Laboratory, Warrington, UK;
4. QUANTA, which is commercially available from Accelrys, Inc., San Diego, CA;
5. INSIGHT, which is commercially available from Accelrys, Inc., San Diego, CA;



6. ARP/wARP (Perrakis *et al.*, *Nature Struc. Biol.* 6:458-463 (1999); Lamzin *et al.*, *Acta Cryst. D* 49:129-147 (1993)). ARP/wARP is commercially available from the European Molecular Biology Laboratory, Heidelberg, Germany; and

7. ICM, which is commercially available from MolSoft, La Jolla, CA.

5 In another preferred embodiment, a method of molecular replacement is utilized to obtain structural information about a VEGFR other than VEGFR2. The structure coordinates of VEGFR2 crystal complexes as described herein are useful in solving the structure of other isoforms of VEGFR or other VEGFR containing complexes.

Furthermore, the structure coordinates of the VEGFR polypeptides, described herein, are  
10 useful in solving the structure of other VEGFR proteins that have amino acid substitutions, additions and/or deletions. These VEGFR mutants may optionally be crystallized in complex with a chemical entity, such as one of the ligand listed above. The crystal structure of such a complex may then be solved by molecular replacement and compared with structure of the VEGFR polypeptides described herein. Potential sites for modification within the various binding sites of the enzyme may thus be  
15 identified. This information provides an additional tool for determining the efficient binding interactions, for example, increased hydrophobic interactions, between VEGFR and a chemical entity.

The structure coordinates are also useful to solve the structure of crystals of VEGFR homologues complexed with chemical entities. This approach enables the determination of the important sites for interaction between chemical entities, including potential VEGFR modulators with  
20 the VEGFR ligand binding site. For example, high resolution X-ray diffraction data collected from crystals exposed to different types of solvent allows the determination of where each type of solvent molecule resides. Small molecules that bind tightly to those sites can then be designed and synthesized and tested for their ability to modulate VEGFR activity.

All of the complexes referred to above may be studied using known X-ray diffraction  
25 techniques and may be refined versus about 1.0 to about 3.0 Å resolution X-ray data to an R value of about 0.20 or less using computer software, such as X-PLOR (Brunger, 1992, *supra*, distributed by Accelrys, Inc., San Diego, CA. This information may be used to optimize known VEGFR modulators, and to design new VEGFR modulators.

For all of the drug design strategies described herein, successive iterations of any and/or all  
30 of the steps provided by the aforementioned procedures are typically performed to yield one or more ligands with improved properties (e.g., activity).

The following examples are for the purpose of illustrating various embodiments and features of the invention.

### 35 Examples

#### **Example 1: Purification and Biochemical Analysis of VEGFR2KD Polypeptides Cloning a VEGFR2 Protein**

The coding sequence (Terman *et al.*, *Biochem Biophys. Res. Commun.* 187: 1579-86 (1992))  
40 for the cytoplasmic domain of the VEGFR2 was amplified by PCR (Mullis *et al.*, *Biotechnology* 24: 17-27 (1992)) from a human aorta cDNA pool (Clontech, Palo Alto, CA). Two overlapping sequences were amplified independently: Vcyt (amino acid residues M806-V1356), which represent the entire

cytoplasmic domain, and Vcat (amino acid residues C817M-G1191), with boundaries based upon a primary amino acid sequence alignment with the insulin receptor kinase catalytic domain (Wei *et al.*, *J. Biol. Chem.* 270: 8122-8130 (1995)).

The PCR oligonucleotide primer sequences for Vcyt were:  
 5 **Vcyt5** 5'-CAGCATATGGATCCAGATGAACTCCCATTGG-3' (SEQ ID NO: 6) and  
**Vcyt3** 5'-GCGGTCGACTTAAACAGGAGGAGAGCTCAGTGTG-3' (SEQ ID NO: 7).

The PCR oligonucleotide primer sequences for Vcat were:  
**Vcat5** 5'-GCACATATGGAACGACTGCCTTATGATGCCAGC-3' (SEQ ID NO: 8) and  
**Vcat3** 5'-CCTGTCGACTTATCCAGAATCCTCTTCCATGCTCAAAG-5' (SEQ ID NO: 9).

10 The amplified DNA was digested with the restriction enzymes NdeI and Sall, ligated into the *E. coli* plasmid pET24a (Novagen, Madison, WI) and sequence verified (SEQ ID NO: 1). When compared to the original VEGFR2 sequence in Genbank (Accession number 346345), two nucleotide differences were noted that resulted in codon changes (Glu848Val and Asn835Lys) in both Vcyt and Vcat. Our sequence (SEQ ID NO: 1) agrees with subsequent VEGFR2 Genbank submissions  
 15 (Accession numbers 2655412 and 3132833).

Mutations were introduced by oligonucleotide site directed mutagenesis (Kunkel, T.A., *Proc. Natl Acad. Sci. USA*, 82: 488-492 (1985)) using the Muta-Gene *in vitro* Mutagenesis Kit (Bio-Rad, Hercules, CA). The Vcat DNA fragment was subcloned from the pET24a vector using an NdeI-XhoI digest into the vector pMGH4 (Schoner *et al.*, *Proc. Natl Acad. Sci. USA*, 83: 8506-8510 (1986); Kan  
 20 *et al.*, *J. Protein Chem.*, 11: 467-73 (1992)) and this vector was used to generate the ssDNA uracil template (minus strand) in *E. coli* strain CJ236 supplied in the kit. An oligo

5'-CTCAGCAGGATTGATAAGACTACATTGTTC-3' (SEQ ID NO: 10)  
 was designed to create a construct (Vcat(Δ G1172-G 1191)) which truncated the C-terminus to amino acid residue D1171. Another oligo

25 5'-GAATTTGTCCCTACAAGGAAGCTCCTGAAGATCTG-3' (SEQ ID NO: 11)  
 was designed to delete the central 50 amino acid residues (amino acid residues T940-E989) of the insert kinase domain, based on a sequence alignment with FGFR1 (Mohammadi *et al.*, *Cell* 86: 577-87 (1996)). Sequence analysis detected an inadvertent Glu990-Val mutation. All DNA modification and restriction enzymes were purchased from New England Biolabs and oligonucleotides were  
 30 purchased from Genosys Biotechnology.

The VEGFR2KD polypeptide (SEQ ID NO: 3) was made in several steps to combine the necessary mutations into the baculovirus expression vector pAcSG2 (Pharmingen San Diego, CA):

Step 1: the coding region for Vcyt was PCR subcloned from the pET24a vector into the NcoI-KpnI sites of vector pAcSG2.

35 Step 2: a 2358bp Scal-BglII DNA fragment from plasmid pMGH4-Vcat (Δ T940-E989, E990V) was ligated to a 1695bp BglII-ScaI DNA fragment from pMGH4-Vcat (Δ G1172-G1191) creating a pMGH4-Vcat (Δ T940-E989, E990V, Δ G1172-G1191) vector.

Step 3: a 913bp BstEII-EagI DNA fragment a pMGH4-Vcat (Δ T940-E989, E990V, Δ G1172-G1191) was ligated to a 3290bp EagI-BstEII DNA fragment from pAcSG2-Vcyt  
 40 creating pAcSG2-Vcyt (Δ T940-E989, E990V, Δ G1172-G1191), also referred to as VEGFR2KD (SEQ ID NO: 3). This final construct was sequence verified through the entire

coding region and confirmed to contain only these known mutations from the wild-type sequence.

DNA encoding VEGFR2KD was transfected into Sf9 cells with linearized baculovirus DNA according to the protocol of the manufacturer (Pharmingen, San Diego, CA). Single plaques were isolated from this transfection and high titer stocks generated. All stocks were examined by isolation of baculoviral DNA and PCR amplification of the insert using the polyhedron forward and reverse primers (Invitrogen, San Diego, CA). Sf21 cells were infected at 1-1.5 million cells/mL at MOI=5 for 72 hours and harvested by centrifugation.

#### **Purification of VEGFR2KD from Sf21 Cells**

Cell pellets were lysed by dounce homogenization and sonication in 20 mM Tris (pH 8.0), 20 mM NaCl, 5 mM DTT, and 5% (v/v) glycerol. The lysate was centrifuged for 50 minutes at 35,000 rpm in a Ti45 rotor. The soluble fraction was loaded onto a 40 mL Q-30 anion exchange column (Pharmacia) and eluted with a 20 mM to 600 mM NaCl gradient in 20 mM Tris (pH 8.0), 5 mM DTT, and 5% (v/v) glycerol over 20 column volumes. VEGFR2KD protein was pooled by SDS-PAGE gel analysis and by the presence of kinase activity as measured against gastrin substrate peptide (Boehringer Mannheim). Pooled material was loaded onto a 40 mL hydroxyapatite (Bio-Rad) column and washed extensively with 20 mM Tris (pH 8.0), 50 mM NaCl, 5 mM DTT, and 5% glycerol. Protein was eluted using a 500 mL linear gradient from 0 to 50 mM potassium phosphate (pH 8.0), 50 mM NaCl, 5 mM DTT, and 5% glycerol. VEGFR2KD (SEQ ID NO: 3) protein was pooled by SDS-PAGE gel analysis and by the presence of kinase activity as measured against the gastrin peptide. Material from this column was then diluted 1:1 with 20 mM Tris (pH 8.0), 20 mM NaCl, 5 mM DTT, and 5% glycerol and loaded onto an 8 mL Q-15 anion exchange column (Pharmacia). Protein was eluted using with a 180 mL linear NaCl gradient (20 mM-175 mM) in 20 mM Tris (pH 8.0), 5 mM DTT, and 5% glycerol. VEGFR2KD (SEQ. ID NO: 3) protein was pooled as described above. 4 M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> was added to the pool to final concentration of 0.6 M and the pool loaded onto a 10 mL HP-phenyl Sepharose column (Pharmacia). VEGFR2KD (SEQ. ID NO: 3) protein was eluted using a 200 mL linear reverse gradient from 0.6 M to 0 M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> in 20 mM Tris and 5 mM DTT.

Purified VEGFR2KD protein (SEQ ID NO: 3) was buffer exchanged into 50 mM HEPES (pH 7.5), 10 mM DTT, 10 % glycerol, and 25 mM NaCl over a 500 mL G-25 column (Pharmacia) and concentrated to 1 mg protein/mL through a 10 kD cutoff polysulfone membrane (Amicon). Final material was aliquoted and flash frozen in liquid nitrogen and stored at -70°C.

The purified protein was then buffer exchanged over a Sephadex G-25 column (Pharmacia) into either: (1) 10 mM HEPES (pH 7.5), 50 mM NaCl, 10 mM DTT, and 5% (v/v) glycerol; or (2) 10 mM HEPES (pH 7.5), 10 mM NaCl, 10 mM DTT, and 5% (v/v) DMSO. The final material was concentrated through a 10 kD cutoff polysulfone membrane (Amicon), aliquoted, and flash frozen in liquid nitrogen and stored at -70°C.

#### **Example 2: Crystallization and Structural Determination of VEGFR2KD: Compound 1 Complex**

The conformation of VEGFR2KD described herein was first determined as a complex with Compound 1. Protein samples used for VEGFR2KD: Compound 1 complex crystallizations were prepared by thawing aliquots (on ice) of VEGFR2KD protein (SEQ. ID NO: 3) stored in 10 mM

HEPES (pH 7.5), 50 mM NaCl, 10 mM DTT, and 5% (v/v) glycerol. The protein sample was then buffer exchanged into 10 mM HEPES (pH 7.5), 10 mM NaCl, and 10 mM DTT and concentrated. Initial crystallization conditions were found from a large random screen using the hanging drop vapor diffusion method. Each test crystallization drop was prepared by mixing approximately 2  $\mu$ l of protein solution (VEGFR2KD at 3 mg/mL, 10 mM HEPES (pH 7.5), 10 mM NaCl, and 10 mM DTT) and an equal volume of the crystallization screening solution on a glass coverslip and suspending this coverslip above a reservoir of the same crystallization screening solution. This screen was conducted at 4°C. Preliminary crystals appeared using the Hampton Screen II #30 crystallization solution (Hampton Research Inc; solution 30 contains 100 mM HEPES (pH 7.5), 10% (w/v) polyethylene glycol (PEG) MW = 6000, and 5% (v/v) 2,4-methylpentanediol (MPD)). Further refinement of these conditions, and microseeding with preliminary crystals, produced crystals large enough for X-ray diffraction data collection.

Microseeding was found to work best when the crystals from which the microseeds were gathered were less than 1 month old. The crystal used for data collection was grown at 13°C by mixing 2  $\mu$ l of protein solution (VEGFR2KD at 5 mg/mL, 100 mM HEPES (pH 7.5), 10 mM NaCl, and 10 mM DTT) with an equal volume of precipitant solution (100 mM HEPES (pH 7.5), 13% (w/v) PEG MW=6000 (Fluka Chemical Co.), 5% (v/v) MPD, and 200 mM ammonium sulfate) and suspending the drop above reservoir of the precipitant solution. After 12-18 hours the drop was microseeded by touching a rabbit whisker to a preliminary crystal of the VEGFR2KD: Compound 1 complex, then touching the rabbit whisker to the crystallization drop, and resealing the drop above the reservoir.

For X-ray data collection, a crystal of the VEGFR2KD: Compound 1 complex was transferred, using a fiber loop, to a cryoprotectant solution for approximately 3 seconds, flash frozen in liquid nitrogen, and placed in a stream of liquid nitrogen on the X-ray data collection apparatus. The cryoprotectant solution contained 100 mM HEPES (pH 7.5), 200 mM ammonium sulfate, 15% PEG MW = 6000 (w/v), 30% (v/v) MPD, 500  $\mu$ M AG-013121, and approximately 0.5% (v/v) DMSO.

An X-ray diffraction data set was collected using a Rigaku RU-200 rotating anode X-ray generator (CuK $\alpha$  radiation) and a MAR Research image plate detector. Data were integrated and scaled using the programs DENZO and SCALEPACK. Crystals of the VEGFR2KD: Compound 1 complex were found to belong the C2 space group containing one VEGFR2KD: Compound 1 complex per crystallographic asymmetric unit cell dimensions of  $a = 136.25$  Å,  $b = 57.24$  Å,  $c = 52.10$  Å,  $\alpha = 90^\circ$ ,  $\beta = 94.0^\circ$ , and  $\gamma = 90^\circ$ . The data set has an  $R_{\text{sym}}$  of 0.059 and contains 90.4 % of the data in the resolution range of 20 to 2.2 Å.

Initial crystallographic phases for the VEGFR2KD: Compound 1 complex were found using the Molecular Replacement Analysis program EPMR (Kissinger *et al.*, *Acta Crystallographica D* 55: 484-91 (1999)) and the structure of unliganded phosphorylated VEGFR2KD as a starting model (U.S. Patent No. 6,316,603; McTigue *et al.*, *Structure* 7(3):319-30 (1999)). The atomic coordinates for the unliganded phosphorylated VEGFR2KD are publicly available through the Research Collaboratory for Structural Bioinformatics (RCSB) Protein Data Bank as entry 1VR2. The search model for molecular replacement contained protein atoms of amino acid residues 827 through 935, 1001 through 1045, and 1066 through 1168 of SEQ ID NO: 2 of the unliganded phosphorylated VEGFR2KD structure. The best molecular replacement solution was the top peak and had a correlation coefficient of 0.404

and an R-factor of 0.487 for data in the range of 15-4.0 Å. After Molecular Replacement Analysis, the model was subjected to rigid body, simulated annealing, and conjugant gradient refinement using the program Xplor (version 3.1) together with multiple rounds of manual fitting to electron density maps. The final model contains VEGFR2KD amino acid residues 822 through 938, 999 through 1060, and 1067 through 1168 of SEQ ID NO: 2, Compound 2, and 170 ordered water molecules. The R-factor for the final model is 0.217 for data with  $F_o > 2\sigma$  in the resolution range 10-2.5 Å. The crystal coordinates of the VEGFR2KD: Compound 2 complex are provided in Table 1.

X-ray structures of other VEGFR2KD: ligand complexes, such as, for example, the ligands listed above, that crystallize in the same C2 crystal form with approximate cell dimensions of  $a = 136$  Å,  $b = 57$  Å,  $c = 52$  Å,  $\alpha = 90^\circ$ ,  $\beta = 94.0^\circ$ , and  $\gamma = 90^\circ$ , can be determined by difference Fourier and least-squares refinement methods using either the protein atoms of VEGFR2KD: Compound 1 complex structure, or another crystallographically isomorphous complex, as the initial structural model.

### **Example 3: Crystallization and Structural Determination of VEGFR2KD: Compound 2 Complex**

Crystals of VEGFR2KD complexed with Compound 2 were grown by the following procedure. VEGFR2KD peptide (SEQ ID NO: 3) at a concentration of between 5 to 6 mg/mL in a storage buffer of 10 mM HEPES (pH 7.5), 10 mM NaCl, 10 mM dithiothreitol, and 5% (v/v) DMSO was thawed on ice from a storage temperature of  $-70^\circ\text{C}$  and the crystallization samples were subsequently kept at  $4^\circ\text{C}$  throughout the entire crystallization process. Compound 2, as a 20 mM solution in DMSO, was added to the protein sample such that the final inhibitor concentration was approximately 500  $\mu\text{M}$ . Exposure of the solutions containing Compound 2 to light was minimized to prevent photo-induced isomerization of Compound 2. Prior to setting up crystallization experiments, the sample was centrifuged at 13,000 rpm for approximately 6-8 minutes to remove any undissolved particulates.

Crystallization experiments were conducted according to the hanging drop vapor-diffusion method. 2  $\mu\text{L}$  of the protein-inhibitor complex sample was placed on a plastic coverslip and mixed with 2  $\mu\text{L}$  of a reservoir solution (100 mM HEPES (pH 7.5), 200 mM ammonium sulfate, 5% (v/v) MPD, and 15-20% (w/v) polyethylene glycol (MW = 6000) (Fluka Chemical Co.)) and the coverslips were inverted and placed in sealed chambers above 0.5- 1.0 mL of the reservoir solution. Before sealing the coverslips above the reservoirs, BME was added to the reservoirs to a final concentration of 60 mM, the coverslips were then sealed and placed in the dark to prevent photo-induced isomerization of Compound 2. After 12-18 hours of equilibration, the crystallization drops were microseeded by touching a rabbit whisker to a previously grown crystal of VEGFR2KD bound to Compound 2 and then touching the fiber to the drops containing VEGFR2KD and Compound 2. Small VEGFR2KD: Compound 2 complex crystals appeared in approximately one week. These small crystals were then macroseeded into fresh drops containing VEGFR2KD and Compound , prepared as above, which had equilibrated for 12-18 hours suspended above the crystallization reservoir solutions.

Macroseeding was done by dipping a crystal into the reservoir briefly to wash off any new seeds and then putting the washed crystal into an equilibrated drop. After approximately 1 week new crystals of approximate dimensions 0.1 mm x 0.1 mm x 0.5 mm appeared alongside the macroseed.

The macroseed was never used for data collection as the macroseeds were always observed to have a higher degree of disorder than the crystals which grew alongside the macroseed.

For X-ray data collection, a crystal of the VEGFR2KD: Compound 2 complex was transferred, using a fiber loop, to a cryoprotectant solution for approximately 3 seconds, flash frozen in liquid nitrogen, and placed in a stream of liquid nitrogen on the X-ray data collection apparatus. The cryoprotectant solution contained 100 mM HEPES (pH 7.5), 200 mM ammonium sulfate, 15% PEG (w/v) (MW = 6000), 30% (v/v) MPD, 500  $\mu$ M AG-013736, and approximately, 2% (v/v) DMSO.

An X-ray diffraction data set was collected using a Rigaku RU-200 rotating anode X-ray generator (CuK $\alpha$  radiation) and a MAR300 MAR Research image plate detector. Data were integrated and scaled using the programs DENZO and SCALEPACK. Analysis of the data showed the crystals belong to space group C2 with unit cell dimensions of  $a = 135.66$  Å,  $b = 57.22$  Å,  $c = 51.83$  Å,  $\alpha = 90^\circ$ ,  $\beta = 93.441^\circ$ , and  $\gamma = 90^\circ$ . The agreement between multiply observed reflections ( $R_{\text{sym}}$ ) is 0.051 for data in the range of 20-1.95 Å.  $R_{\text{sym}}$  is defined as  $(\text{SUM}(\text{ABS}(|I - \langle I \rangle|)) / \text{SUM}(I))$ , where  $I$  represents the observed diffraction intensity. The data set contains 99% of the unique reflections in the range of 20-1.95 Å.

The three-dimensional structure of the VEGFR2KD: Compound 2 complex was determined by standard refinement techniques using the structure of a VEGFR2KD: N-(4-Piperazin-1-yl-3-trifluoromethyl-phenyl)-2-[3-((E)-styryl)-1H-indazol-6-ylsulfanyl]-benzamide complex as a starting model, which was derived through iterative cycles of structure solutions from the VEGFR2KD: Compound 1 complex structure (Example 2). Iterative cycles of least-squares refinement using Xplor (version 3.1) with manual fitting of the model to electron density maps resulted in a model with a final R-factor of 0.198 for data with  $F_o > 2\sigma$  in the resolution range 8 to 1.95 Å. The final model contains atoms of VEGFR2KD, amino acid residues 816 through 938 and 998 through 1166 of SEQ ID NO: 2, Compound 2, and 281 water molecules. The crystal coordinates of the VEGFR2KD: Compound 2 complex are provided in Table 2.

#### **Example 4: Identification of VEGFR2KD Binding Site**

Amino acid residues were defined as forming part of the ligand binding site if they contain atoms whose positions are within about 5Å of the position of a ligand atom. This analysis was calculated with InsightII (98.0) (Accelrys, San Diego, CA). This analysis was performed using the structural coordinates of VEGFR2KD in complex with Compounds 3, 4, and 5 (provided in Tables 3, 4, and 5, respectively), chosen for chemical diversity, and the residues defined as forming the ligand binding site are a composite of the residues that are within 5Å of a ligand atom in these structures (See Table 6).

TABLE 1

**Atomic Coordinates for  
VEGFR2KD: 3-(1H-Pyrazolo[3,4-d]pyrimidin-4-ylsulfanylmethyl)-N-(3,4,5- trimethoxy-phenyl)-  
benzamide (Compound 1)  
Complex Crystalline Structure**

5

10	ATOM	1	CB	TYR	822	40.630	20.424	40.608	1.00	25.50
	ATOM	2	CG	TYR	822	39.987	21.220	41.750	1.00	28.06
	ATOM	3	CD1	TYR	822	40.399	21.114	43.131	1.00	27.04
	ATOM	4	CE1	TYR	822	39.810	21.904	44.153	1.00	21.22
	ATOM	5	CD2	TYR	822	38.964	22.139	41.460	1.00	24.80
	ATOM	6	CE2	TYR	822	38.392	22.909	42.483	1.00	19.23
15	ATOM	7	CZ	TYR	822	38.815	22.784	43.776	1.00	16.01
	ATOM	8	OH	TYR	822	38.191	23.559	44.668	1.00	17.40
	ATOM	9	C	TYR	822	42.239	22.212	40.432	1.00	28.87
	ATOM	10	O	TYR	822	43.120	21.689	41.092	1.00	25.40
	ATOM	11	N	TYR	822	42.352	20.610	38.612	1.00	29.39
20	ATOM	12	CA	TYR	822	41.429	21.316	39.561	1.00	28.27
	ATOM	13	N	ASP	823	41.920	23.509	40.527	1.00	31.19
	ATOM	14	CA	ASP	823	42.736	24.411	41.380	1.00	28.96
	ATOM	15	CB	ASP	823	43.342	25.428	40.446	1.00	33.00
	ATOM	16	CG	ASP	823	44.074	26.575	41.082	1.00	36.82
25	ATOM	17	OD1	ASP	823	44.126	26.729	42.309	1.00	38.66
	ATOM	18	OD2	ASP	823	44.599	27.343	40.277	1.00	41.21
	ATOM	19	C	ASP	823	42.057	25.056	42.563	1.00	26.18
	ATOM	20	O	ASP	823	41.419	26.091	42.569	1.00	23.19
	ATOM	21	N	ALA	824	42.414	24.414	43.635	1.00	26.01
30	ATOM	22	CA	ALA	824	41.991	24.697	44.985	1.00	25.75
	ATOM	23	CB	ALA	824	42.690	23.681	45.869	1.00	25.09
	ATOM	24	C	ALA	824	42.218	26.088	45.494	1.00	24.89
	ATOM	25	O	ALA	824	41.464	26.569	46.328	1.00	23.26
	ATOM	26	N	SER	825	43.282	26.737	45.092	1.00	25.76
35	ATOM	27	CA	SER	825	43.443	28.125	45.586	1.00	28.32
	ATOM	28	CB	SER	825	44.774	28.851	45.162	1.00	30.00
	ATOM	29	OG	SER	825	45.622	27.956	44.439	1.00	31.61
	ATOM	30	C	SER	825	42.335	28.979	44.998	1.00	27.13
	ATOM	31	O	SER	825	41.674	29.808	45.642	1.00	28.29
40	ATOM	32	N	LYS	826	42.187	28.813	43.678	1.00	25.69
	ATOM	33	CA	LYS	826	41.163	29.603	42.968	1.00	23.69
	ATOM	34	CB	LYS	826	41.420	29.434	41.453	1.00	24.28
	ATOM	35	CG	LYS	826	40.940	30.509	40.476	1.00	26.68
	ATOM	36	CD	LYS	826	41.980	30.465	39.301	1.00	38.26
45	ATOM	37	CE	LYS	826	43.457	31.099	39.500	1.00	43.74
	ATOM	38	NZ	LYS	826	44.330	31.077	38.281	1.00	41.93
	ATOM	39	C	LYS	826	39.755	29.174	43.399	1.00	21.18
	ATOM	40	O	LYS	826	38.967	30.010	43.789	1.00	21.93
	ATOM	41	N	TRP	827	39.434	27.903	43.497	1.00	17.48
50	ATOM	42	CA	TRP	827	38.067	27.488	43.845	1.00	13.34
	ATOM	43	CB	TRP	827	37.531	26.331	42.953	1.00	12.78
	ATOM	44	CG	TRP	827	37.876	26.645	41.584	1.00	8.55
	ATOM	45	CD2	TRP	827	37.204	27.641	40.933	1.00	5.18
	ATOM	46	CE2	TRP	827	37.914	27.841	39.724	1.00	6.96
55	ATOM	47	CE3	TRP	827	36.071	28.353	41.317	1.00	3.14
	ATOM	48	CD1	TRP	827	38.968	26.249	40.777	1.00	9.15
	ATOM	49	NE1	TRP	827	39.000	26.993	39.632	1.00	11.49
	ATOM	50	CZ2	TRP	827	37.430	28.805	38.848	1.00	6.02
	ATOM	51	CZ3	TRP	827	35.622	29.305	40.443	1.00	4.71
60	ATOM	52	CH2	TRP	827	36.283	29.531	39.225	1.00	7.61
	ATOM	53	C	TRP	827	37.734	27.029	45.178	1.00	15.40
	ATOM	54	O	TRP	827	36.556	27.180	45.502	1.00	20.78

	ATOM	55	N	GLU	828	38.602	26.459	46.006	1.00	17.45
	ATOM	56	CA	GLU	828	38.078	25.936	47.296	1.00	16.73
	ATOM	57	CB	GLU	828	39.273	25.203	47.951	1.00	19.98
	ATOM	58	CG	GLU	828	39.041	24.136	49.101	1.00	19.35
5	ATOM	59	CD	GLU	828	38.218	22.950	48.676	1.00	17.22
	ATOM	60	OE1	GLU	828	37.526	22.380	49.511	1.00	16.17
	ATOM	61	OE2	GLU	828	38.297	22.590	47.510	1.00	23.53
	ATOM	62	C	GLU	828	37.393	26.926	48.222	1.00	17.05
	ATOM	63	O	GLU	828	37.814	28.054	48.412	1.00	18.57
10	ATOM	64	N	PHE	829	36.322	26.523	48.883	1.00	16.94
	ATOM	65	CA	PHE	829	35.587	27.445	49.755	1.00	16.74
	ATOM	66	CB	PHE	829	34.340	27.923	48.918	1.00	15.15
	ATOM	67	CG	PHE	829	33.379	28.816	49.623	1.00	12.24
	ATOM	68	CD1	PHE	829	33.702	30.164	49.831	1.00	8.89
15	ATOM	69	CD2	PHE	829	32.159	28.285	50.109	1.00	7.57
	ATOM	70	CE1	PHE	829	32.786	30.972	50.531	1.00	8.96
	ATOM	71	CE2	PHE	829	31.249	29.091	50.813	1.00	11.13
	ATOM	72	CZ	PHE	829	31.571	30.438	51.020	1.00	11.02
	ATOM	73	C	PHE	829	35.222	26.711	51.042	1.00	19.68
20	ATOM	74	O	PHE	829	34.901	25.520	50.961	1.00	19.57
	ATOM	75	N	PRO	830	35.369	27.327	52.244	1.00	20.13
	ATOM	76	CD	PRO	830	36.227	28.481	52.588	1.00	21.27
	ATOM	77	CA	PRO	830	35.202	26.539	53.420	1.00	20.37
	ATOM	78	CB	PRO	830	35.736	27.431	54.524	1.00	17.95
25	ATOM	79	CG	PRO	830	35.757	28.791	53.965	1.00	16.28
	ATOM	80	C	PRO	830	33.809	26.089	53.608	1.00	22.74
	ATOM	81	O	PRO	830	32.934	26.940	53.689	1.00	26.96
	ATOM	82	N	ARG	831	33.574	24.787	53.775	1.00	25.54
	ATOM	83	CA	ARG	831	32.211	24.224	53.995	1.00	28.48
30	ATOM	84	CB	ARG	831	32.373	22.696	54.108	1.00	30.49
	ATOM	85	CG	ARG	831	31.250	22.048	53.264	1.00	33.51
	ATOM	86	CD	ARG	831	31.324	20.518	52.950	1.00	30.49
	ATOM	87	NE	ARG	831	32.701	20.005	52.716	1.00	29.37
	ATOM	88	CZ	ARG	831	32.933	19.091	51.762	1.00	27.25
35	ATOM	89	NH1	ARG	831	34.148	18.595	51.550	1.00	17.91
	ATOM	90	NH2	ARG	831	31.943	18.727	50.944	1.00	28.92
	ATOM	91	C	ARG	831	31.450	24.784	55.211	1.00	29.67
	ATOM	92	O	ARG	831	30.330	24.451	55.566	1.00	28.93
	ATOM	93	N	ASP	832	32.156	25.602	55.967	1.00	32.80
40	ATOM	94	CA	ASP	832	31.690	26.312	57.213	1.00	35.16
	ATOM	95	CB	ASP	832	32.889	26.387	58.333	1.00	40.94
	ATOM	96	CG	ASP	832	34.371	26.004	57.886	1.00	48.02
	ATOM	97	OD1	ASP	832	34.589	24.914	57.305	1.00	50.93
	ATOM	98	OD2	ASP	832	35.319	26.782	58.136	1.00	50.92
45	ATOM	99	C	ASP	832	31.188	27.736	56.854	1.00	32.04
	ATOM	100	O	ASP	832	30.508	28.425	57.602	1.00	34.33
	ATOM	101	N	ARG	833	31.649	28.290	55.747	1.00	27.46
	ATOM	102	CA	ARG	833	31.198	29.604	55.275	1.00	22.37
	ATOM	103	CB	ARG	833	32.446	30.112	54.559	1.00	22.63
50	ATOM	104	CG	ARG	833	33.361	30.691	55.583	1.00	22.10
	ATOM	105	CD	ARG	833	33.751	32.110	55.158	1.00	27.12
	ATOM	106	NE	ARG	833	35.102	32.284	54.563	1.00	31.23
	ATOM	107	CZ	ARG	833	36.269	31.985	55.202	1.00	33.95
	ATOM	108	NH1	ARG	833	37.430	32.228	54.548	1.00	34.06
55	ATOM	109	NH2	ARG	833	36.310	31.405	56.425	1.00	31.38
	ATOM	110	C	ARG	833	29.893	29.439	54.379	1.00	21.61
	ATOM	111	O	ARG	833	29.383	30.317	53.666	1.00	21.01
	ATOM	112	N	LEU	834	29.235	28.292	54.486	1.00	18.69
	ATOM	113	CA	LEU	834	28.051	27.993	53.702	1.00	17.25
60	ATOM	114	CB	LEU	834	28.448	26.955	52.604	1.00	19.28
	ATOM	115	CG	LEU	834	27.500	26.602	51.420	1.00	13.79
	ATOM	116	CD1	LEU	834	27.348	27.722	50.401	1.00	12.97



	ATOM	117	CD2	LEU	834	28.154	25.456	50.716	1.00	11.46
	ATOM	118	C	LEU	834	26.912	27.465	54.510	1.00	17.15
	ATOM	119	O	LEU	834	26.969	26.380	55.067	1.00	20.71
	ATOM	120	N	LYS	835	25.821	28.182	54.466	1.00	16.75
5	ATOM	121	CA	LYS	835	24.601	27.860	55.188	1.00	19.33
	ATOM	122	CB	LYS	835	24.181	29.170	55.910	1.00	23.81
	ATOM	123	CG	LYS	835	25.424	29.973	56.551	1.00	30.13
	ATOM	124	CD	LYS	835	25.645	31.518	56.318	1.00	24.89
	ATOM	125	CE	LYS	835	24.416	32.290	56.931	1.00	29.97
10	ATOM	126	NZ	LYS	835	24.353	33.721	56.542	1.00	24.63
	ATOM	127	C	LYS	835	23.499	27.280	54.280	1.00	22.20
	ATOM	128	O	LYS	835	22.722	27.986	53.639	1.00	22.84
	ATOM	129	N	LEU	836	23.477	25.946	54.115	1.00	22.63
	ATOM	130	CA	LEU	836	22.484	25.225	53.300	1.00	18.76
15	ATOM	131	CB	LEU	836	22.877	23.758	53.352	1.00	17.39
	ATOM	132	CG	LEU	836	23.813	23.298	52.252	1.00	17.49
	ATOM	133	CD1	LEU	836	24.914	24.274	51.907	1.00	18.83
	ATOM	134	CD2	LEU	836	24.420	22.010	52.769	1.00	17.99
	ATOM	135	C	LEU	836	21.008	25.400	53.674	1.00	19.41
20	ATOM	136	O	LEU	836	20.690	25.528	54.835	1.00	19.27
	ATOM	137	N	GLY	837	20.045	25.360	52.748	1.00	19.98
	ATOM	138	CA	GLY	837	18.617	25.515	53.098	1.00	16.05
	ATOM	139	C	GLY	837	17.731	24.615	52.268	1.00	16.52
	ATOM	140	O	GLY	837	17.964	23.417	52.076	1.00	16.42
25	ATOM	141	N	LYS	838	16.648	25.185	51.784	1.00	16.25
	ATOM	142	CA	LYS	838	15.686	24.478	50.954	1.00	16.53
	ATOM	143	CB	LYS	838	14.491	25.367	50.696	1.00	20.17
	ATOM	144	CG	LYS	838	13.631	25.327	51.954	1.00	28.06
	ATOM	145	CD	LYS	838	12.210	25.929	51.705	1.00	33.84
30	ATOM	146	CE	LYS	838	11.039	24.898	51.629	1.00	38.61
	ATOM	147	NZ	LYS	838	9.841	25.436	50.929	1.00	42.47
	ATOM	148	C	LYS	838	16.228	24.000	49.593	1.00	19.63
	ATOM	149	O	LYS	838	17.077	24.600	48.886	1.00	17.81
	ATOM	150	N	PRO	839	15.703	22.852	49.164	1.00	19.44
35	ATOM	151	CD	PRO	839	14.844	21.923	49.920	1.00	18.61
	ATOM	152	CA	PRO	839	16.105	22.336	47.864	1.00	18.05
	ATOM	153	CB	PRO	839	15.864	20.870	48.025	1.00	19.73
	ATOM	154	CG	PRO	839	14.567	20.902	48.836	1.00	21.35
	ATOM	155	C	PRO	839	15.458	22.951	46.609	1.00	17.23
40	ATOM	156	O	PRO	839	14.260	23.237	46.524	1.00	14.70
	ATOM	157	N	LEU	840	16.368	23.308	45.716	1.00	14.39
	ATOM	158	CA	LEU	840	16.042	23.850	44.446	1.00	14.10
	ATOM	159	CB	LEU	840	17.267	24.548	43.899	1.00	11.14
	ATOM	160	CG	LEU	840	17.378	25.753	44.772	1.00	9.22
45	ATOM	161	CD1	LEU	840	18.527	26.581	44.266	1.00	6.51
	ATOM	162	CD2	LEU	840	16.070	26.564	44.742	1.00	6.14
	ATOM	163	C	LEU	840	15.609	22.654	43.641	1.00	17.84
	ATOM	164	O	LEU	840	14.514	22.681	43.111	1.00	23.74
	ATOM	165	N	GLY	841	16.362	21.567	43.537	1.00	19.92
50	ATOM	166	CA	GLY	841	15.891	20.373	42.811	1.00	16.74
	ATOM	167	C	GLY	841	16.411	19.051	43.410	1.00	20.37
	ATOM	168	O	GLY	841	17.443	18.976	44.097	1.00	17.04
	ATOM	169	N	ARG	842	15.680	17.963	43.192	1.00	22.51
	ATOM	170	CA	ARG	842	16.130	16.651	43.684	1.00	26.91
55	ATOM	171	CB	ARG	842	15.484	16.257	44.998	1.00	30.90
	ATOM	172	CG	ARG	842	16.100	17.108	46.066	1.00	41.70
	ATOM	173	CD	ARG	842	15.653	16.653	47.454	1.00	52.08
	ATOM	174	NE	ARG	842	16.292	15.361	47.812	1.00	60.24
	ATOM	175	CZ	ARG	842	16.454	14.998	49.097	1.00	63.35
60	ATOM	176	NH1	ARG	842	17.012	13.820	49.380	1.00	64.81
	ATOM	177	NH2	ARG	842	16.073	15.808	50.101	1.00	66.69
	ATOM	178	C	ARG	842	15.857	15.472	42.749	1.00	26.75

	ATOM	179	O	ARG	842	14.791	15.286	42.158	1.00	27.66
	ATOM	180	N	GLY	843	16.835	14.603	42.657	1.00	25.95
	ATOM	181	CA	GLY	843	16.729	13.404	41.814	1.00	23.80
	ATOM	182	C	GLY	843	16.934	12.216	42.721	1.00	23.54
5	ATOM	183	O	GLY	843	16.566	12.320	43.893	1.00	22.08
	ATOM	184	N	ALA	844	17.454	11.091	42.203	1.00	23.39
	ATOM	185	CA	ALA	844	17.727	9.848	42.999	1.00	26.79
	ATOM	186	CB	ALA	844	17.759	8.539	42.140	1.00	24.80
	ATOM	187	C	ALA	844	19.069	9.824	43.738	1.00	27.40
10	ATOM	188	O	ALA	844	19.257	9.308	44.837	1.00	28.99
	ATOM	189	N	PHE	845	20.044	10.412	43.095	1.00	26.61
	ATOM	190	CA	PHE	845	21.414	10.447	43.607	1.00	25.81
	ATOM	191	CB	PHE	845	22.307	9.578	42.705	1.00	29.43
	ATOM	192	CG	PHE	845	21.741	8.241	42.458	1.00	30.41
15	ATOM	193	CD1	PHE	845	21.883	7.676	41.187	1.00	30.74
	ATOM	194	CD2	PHE	845	21.084	7.519	43.474	1.00	33.15
	ATOM	195	CE1	PHE	845	21.376	6.393	40.924	1.00	31.81
	ATOM	196	CE2	PHE	845	20.568	6.232	43.222	1.00	35.44
	ATOM	197	CZ	PHE	845	20.723	5.675	41.935	1.00	33.07
20	ATOM	198	C	PHE	845	21.983	11.835	43.649	1.00	23.22
	ATOM	199	O	PHE	845	23.167	12.011	43.937	1.00	22.82
	ATOM	200	N	GLY	846	21.176	12.838	43.338	1.00	19.50
	ATOM	201	CA	GLY	846	21.768	14.169	43.394	1.00	16.06
	ATOM	202	C	GLY	846	20.773	15.148	43.844	1.00	14.22
25	ATOM	203	O	GLY	846	19.604	14.792	43.996	1.00	14.73
	ATOM	204	N	GLN	847	21.221	16.357	44.081	1.00	10.40
	ATOM	205	CA	GLN	847	20.285	17.396	44.490	1.00	12.42
	ATOM	206	CB	GLN	847	19.865	17.225	45.952	1.00	12.40
	ATOM	207	CG	GLN	847	20.927	17.564	47.026	1.00	15.34
30	ATOM	208	CD	GLN	847	20.501	17.121	48.405	1.00	14.41
	ATOM	209	OE1	GLN	847	19.382	17.323	48.882	1.00	20.01
	ATOM	210	NE2	GLN	847	21.388	16.473	49.092	1.00	13.81
	ATOM	211	C	GLN	847	20.898	18.756	44.346	1.00	12.11
	ATOM	212	O	GLN	847	22.121	18.841	44.324	1.00	16.25
35	ATOM	213	N	VAL	848	20.093	19.793	44.227	1.00	11.09
	ATOM	214	CA	VAL	848	20.509	21.199	44.142	1.00	11.33
	ATOM	215	CB	VAL	848	20.158	21.925	42.822	1.00	10.65
	ATOM	216	CG1	VAL	848	20.752	23.329	42.801	1.00	7.14
	ATOM	217	CG2	VAL	848	20.862	21.212	41.634	1.00	12.03
40	ATOM	218	C	VAL	848	19.727	21.873	45.227	1.00	14.23
	ATOM	219	O	VAL	848	18.480	21.875	45.311	1.00	11.55
	ATOM	220	N	ILE	849	20.527	22.296	46.193	1.00	16.01
	ATOM	221	CA	ILE	849	19.965	22.980	47.374	1.00	17.85
	ATOM	222	CB	ILE	849	20.283	22.101	48.685	1.00	16.31
45	ATOM	223	CG2	ILE	849	21.670	21.499	48.756	1.00	16.01
	ATOM	224	CG1	ILE	849	20.158	23.019	49.869	1.00	18.43
	ATOM	225	CD1	ILE	849	20.434	22.290	51.164	1.00	24.30
	ATOM	226	C	ILE	849	20.445	24.432	47.492	1.00	17.95
	ATOM	227	O	ILE	849	21.555	24.818	47.127	1.00	17.26
50	ATOM	228	N	GLU	850	19.524	25.309	47.854	1.00	19.59
	ATOM	229	CA	GLU	850	19.844	26.768	48.033	1.00	18.60
	ATOM	230	CB	GLU	850	18.514	27.553	48.180	1.00	18.16
	ATOM	231	CG	GLU	850	18.626	29.007	47.739	1.00	16.89
	ATOM	232	CD	GLU	850	17.315	29.770	47.855	1.00	15.62
55	ATOM	233	OE1	GLU	850	16.246	29.234	48.116	1.00	19.12
	ATOM	234	OE2	GLU	850	17.352	30.971	47.681	1.00	21.59
	ATOM	235	C	GLU	850	20.711	27.003	49.262	1.00	15.71
	ATOM	236	O	GLU	850	20.515	26.381	50.287	1.00	15.36
	ATOM	237	N	ALA	851	21.545	27.989	49.272	1.00	16.19
60	ATOM	238	CA	ALA	851	22.406	28.177	50.440	1.00	16.18
	ATOM	239	CB	ALA	851	23.674	27.320	50.327	1.00	10.56
	ATOM	240	C	ALA	851	22.854	29.613	50.574	1.00	16.96

	ATOM	241	O	ALA	851	22.647	30.395	49.652	1.00	20.19
	ATOM	242	N	ASP	852	23.422	30.009	51.700	1.00	15.39
	ATOM	243	CA	ASP	852	23.902	31.363	51.788	1.00	12.86
	ATOM	244	CB	ASP	852	23.390	32.128	53.040	1.00	16.30
5	ATOM	245	CG	ASP	852	21.912	32.518	53.153	1.00	22.97
	ATOM	246	OD1	ASP	852	21.353	32.570	54.266	1.00	25.60
	ATOM	247	OD2	ASP	852	21.310	32.771	52.117	1.00	27.08
	ATOM	248	C	ASP	852	25.370	31.274	51.872	1.00	10.50
	ATOM	249	O	ASP	852	25.883	30.714	52.809	1.00	12.87
10	ATOM	250	N	ALA	853	26.119	31.825	50.983	1.00	11.10
	ATOM	251	CA	ALA	853	27.555	31.776	51.060	1.00	13.76
	ATOM	252	CB	ALA	853	28.094	31.326	49.707	1.00	14.30
	ATOM	253	C	ALA	853	28.167	33.133	51.442	1.00	18.59
	ATOM	254	O	ALA	853	27.991	34.159	50.758	1.00	19.95
15	ATOM	255	N	PHE	854	28.938	33.155	52.547	1.00	21.31
	ATOM	256	CA	PHE	854	29.584	34.396	53.065	1.00	20.99
	ATOM	257	CB	PHE	854	29.778	34.278	54.656	1.00	22.36
	ATOM	258	CG	PHE	854	30.310	35.558	55.249	1.00	19.94
	ATOM	259	CD1	PHE	854	31.688	35.859	55.278	1.00	20.28
20	ATOM	260	CD2	PHE	854	29.420	36.522	55.759	1.00	17.93
	ATOM	261	CE1	PHE	854	32.182	37.089	55.790	1.00	19.96
	ATOM	262	CE2	PHE	854	29.892	37.745	56.274	1.00	19.13
	ATOM	263	CZ	PHE	854	31.270	38.024	56.284	1.00	16.96
	ATOM	264	C	PHE	854	30.905	34.752	52.398	1.00	18.33
25	ATOM	265	O	PHE	854	31.901	34.129	52.583	1.00	19.13
	ATOM	266	N	GLY	855	31.051	35.755	51.632	1.00	20.22
	ATOM	267	CA	GLY	855	32.336	36.024	51.030	1.00	22.59
	ATOM	268	C	GLY	855	32.787	35.038	49.985	1.00	26.51
	ATOM	269	O	GLY	855	34.009	34.951	49.739	1.00	27.80
30	ATOM	270	N	ILE	856	31.852	34.380	49.243	1.00	28.23
	ATOM	271	CA	ILE	856	32.311	33.434	48.172	1.00	28.36
	ATOM	272	CB	ILE	856	31.117	32.506	47.770	1.00	24.45
	ATOM	273	CG2	ILE	856	29.927	33.240	47.270	1.00	19.45
	ATOM	274	CG1	ILE	856	31.695	31.492	46.774	1.00	22.95
35	ATOM	275	CD1	ILE	856	30.831	30.235	46.769	1.00	21.31
	ATOM	276	C	ILE	856	32.926	34.137	46.940	1.00	32.59
	ATOM	277	O	ILE	856	33.921	33.745	46.344	1.00	33.97
	ATOM	278	N	ASP	857	32.315	35.261	46.613	1.00	35.81
	ATOM	279	CA	ASP	857	32.605	36.200	45.526	1.00	38.96
40	ATOM	280	CB	ASP	857	31.199	36.814	45.133	1.00	42.25
	ATOM	281	CG	ASP	857	30.343	37.561	46.241	1.00	44.81
	ATOM	282	OD1	ASP	857	29.352	38.224	45.838	1.00	42.34
	ATOM	283	OD2	ASP	857	30.633	37.448	47.467	1.00	47.52
	ATOM	284	C	ASP	857	33.664	37.309	45.789	1.00	42.76
45	ATOM	285	O	ASP	857	33.583	38.420	45.269	1.00	43.54
	ATOM	286	N	LYS	858	34.682	37.135	46.604	1.00	46.91
	ATOM	287	CA	LYS	858	35.743	38.193	46.849	1.00	53.41
	ATOM	288	CB	LYS	858	36.546	38.367	45.471	1.00	59.69
	ATOM	289	CG	LYS	858	37.512	37.157	45.096	1.00	67.88
50	ATOM	290	CD	LYS	858	38.187	36.930	43.655	1.00	70.92
	ATOM	291	CE	LYS	858	39.646	36.254	43.750	1.00	73.51
	ATOM	292	NZ	LYS	858	40.096	35.388	42.619	1.00	70.67
	ATOM	293	C	LYS	858	35.278	39.592	47.447	1.00	53.66
	ATOM	294	O	LYS	858	35.741	40.739	47.204	1.00	53.43
55	ATOM	295	N	THR	859	34.472	39.395	48.500	1.00	49.30
	ATOM	296	CA	THR	859	33.824	40.455	49.294	1.00	43.47
	ATOM	297	CB	THR	859	32.465	40.781	48.660	1.00	43.40
	ATOM	298	OG1	THR	859	31.692	39.572	48.813	1.00	40.83
	ATOM	299	CG2	THR	859	32.523	41.219	47.168	1.00	38.96
60	ATOM	300	C	THR	859	33.568	39.912	50.698	1.00	40.61
	ATOM	301	O	THR	859	33.697	38.709	50.863	1.00	43.68
	ATOM	302	N	ALA	860	33.361	40.629	51.793	1.00	33.76

	ATOM	303	CA	ALA	860	32.994	39.858	53.003	1.00	28.46
	ATOM	304	CB	ALA	860	33.631	40.548	54.176	1.00	26.80
	ATOM	305	C	ALA	860	31.410	39.919	53.043	1.00	27.52
	ATOM	306	O	ALA	860	30.683	40.169	54.027	1.00	25.01
5	ATOM	307	N	THR	861	30.814	39.746	51.846	1.00	26.00
	ATOM	308	CA	THR	861	29.334	39.789	51.579	1.00	22.13
	ATOM	309	CB	THR	861	28.989	40.388	50.168	1.00	19.09
	ATOM	310	OG1	THR	861	29.847	41.493	49.978	1.00	15.19
	ATOM	311	CG2	THR	861	27.506	40.804	49.992	1.00	14.82
10	ATOM	312	C	THR	861	28.624	38.438	51.592	1.00	22.11
	ATOM	313	O	THR	861	29.162	37.474	51.043	1.00	22.99
	ATOM	314	N	CYS	862	27.411	38.371	52.179	1.00	22.40
	ATOM	315	CA	CYS	862	26.608	37.119	52.173	1.00	22.73
	ATOM	316	CB	CYS	862	25.336	37.056	53.044	1.00	18.59
15	ATOM	317	SG	CYS	862	24.815	35.338	53.494	1.00	26.93
	ATOM	318	C	CYS	862	26.086	37.121	50.794	1.00	22.95
	ATOM	319	O	CYS	862	25.811	38.203	50.260	1.00	26.48
	ATOM	320	N	ARG	863	25.985	35.971	50.174	1.00	24.36
	ATOM	321	CA	ARG	863	25.469	35.922	48.797	1.00	22.79
20	ATOM	322	CB	ARG	863	26.719	36.265	48.001	1.00	22.28
	ATOM	323	CG	ARG	863	27.217	35.371	46.914	1.00	28.94
	ATOM	324	CD	ARG	863	26.218	35.159	45.768	1.00	37.53
	ATOM	325	NE	ARG	863	26.697	35.722	44.486	1.00	42.79
	ATOM	326	CZ	ARG	863	26.015	35.598	43.326	1.00	46.47
25	ATOM	327	NH1	ARG	863	26.609	36.182	42.278	1.00	47.72
	ATOM	328	NH2	ARG	863	24.821	34.943	43.200	1.00	43.35
	ATOM	329	C	ARG	863	24.805	34.570	48.558	1.00	19.98
	ATOM	330	O	ARG	863	25.310	33.560	49.030	1.00	20.52
	ATOM	331	N	THR	864	23.575	34.558	48.067	1.00	15.49
30	ATOM	332	CA	THR	864	22.802	33.352	47.764	1.00	14.56
	ATOM	333	CB	THR	864	21.364	33.670	47.435	1.00	14.48
	ATOM	334	OG1	THR	864	20.980	34.631	48.384	1.00	17.98
	ATOM	335	CG2	THR	864	20.371	32.510	47.575	1.00	13.91
	ATOM	336	C	THR	864	23.357	32.623	46.529	1.00	16.34
35	ATOM	337	O	THR	864	23.507	33.154	45.401	1.00	19.29
	ATOM	338	N	VAL	865	23.602	31.332	46.759	1.00	13.52
	ATOM	339	CA	VAL	865	24.106	30.447	45.747	1.00	9.03
	ATOM	340	CB	VAL	865	25.586	30.099	46.118	1.00	7.73
	ATOM	341	CG1	VAL	865	26.372	31.438	46.218	1.00	2.65
40	ATOM	342	CG2	VAL	865	25.640	29.160	47.349	1.00	2.00
	ATOM	343	C	VAL	865	23.194	29.164	45.660	1.00	11.01
	ATOM	344	O	VAL	865	22.219	28.989	46.434	1.00	10.30
	ATOM	345	N	ALA	866	23.431	28.336	44.610	1.00	7.90
	ATOM	346	CA	ALA	866	22.744	27.070	44.396	1.00	6.58
45	ATOM	347	CB	ALA	866	22.156	26.870	42.997	1.00	7.22
	ATOM	348	C	ALA	866	23.880	26.119	44.465	1.00	9.38
	ATOM	349	O	ALA	866	25.006	26.341	43.989	1.00	11.30
	ATOM	350	N	VAL	867	23.690	25.025	45.133	1.00	12.23
	ATOM	351	CA	VAL	867	24.838	24.069	45.210	1.00	13.25
50	ATOM	352	CB	VAL	867	25.669	24.244	46.679	1.00	9.85
	ATOM	353	CG1	VAL	867	24.905	25.059	47.653	1.00	2.00
	ATOM	354	CG2	VAL	867	26.076	22.920	47.225	1.00	2.00
	ATOM	355	C	VAL	867	24.440	22.630	44.937	1.00	11.42
	ATOM	356	O	VAL	867	23.454	22.105	45.451	1.00	12.66
55	ATOM	357	N	LYS	868	25.144	22.055	43.983	1.00	9.59
	ATOM	358	CA	LYS	868	24.897	20.657	43.598	1.00	11.89
	ATOM	359	CB	LYS	868	25.353	20.260	42.158	1.00	11.88
	ATOM	360	CG	LYS	868	24.733	18.923	41.719	1.00	11.67
	ATOM	361	CD	LYS	868	24.953	18.573	40.245	1.00	11.83
60	ATOM	362	CE	LYS	868	23.956	19.199	39.287	1.00	10.73
	ATOM	363	NZ	LYS	868	24.677	19.077	38.032	1.00	11.06
	ATOM	364	C	LYS	868	25.637	19.724	44.427	1.00	13.15

	ATOM	365	O	LYS	868	26.850	19.822	44.548	1.00	16.62
	ATOM	366	N	MET	869	24.967	18.747	44.926	1.00	17.71
	ATOM	367	CA	MET	869	25.676	17.733	45.747	1.00	19.80
	ATOM	368	CB	MET	869	25.809	18.261	47.192	1.00	17.51
5	ATOM	369	CG	MET	869	24.409	18.565	47.748	1.00	28.59
	ATOM	370	SD	MET	869	24.291	19.396	49.371	1.00	35.80
	ATOM	371	CE	MET	869	24.961	17.951	50.256	1.00	34.49
	ATOM	372	C	MET	869	24.876	16.413	45.676	1.00	17.93
	ATOM	373	O	MET	869	23.795	16.357	45.082	1.00	16.44
10	ATOM	374	N	LEU	870	25.399	15.332	46.240	1.00	19.18
	ATOM	375	CA	LEU	870	24.718	14.039	46.219	1.00	19.06
	ATOM	376	CB	LEU	870	25.755	12.902	46.255	1.00	12.92
	ATOM	377	CG	LEU	870	26.693	13.038	45.022	1.00	16.50
	ATOM	378	CD1	LEU	870	27.850	12.147	45.278	1.00	12.10
15	ATOM	379	CD2	LEU	870	25.989	12.733	43.631	1.00	16.41
	ATOM	380	C	LEU	870	23.703	13.833	47.302	1.00	22.25
	ATOM	381	O	LEU	870	23.469	14.629	48.217	1.00	26.50
	ATOM	382	N	LYS	871	23.065	12.704	47.147	1.00	23.18
	ATOM	383	CA	LYS	871	22.034	12.256	48.048	1.00	22.67
20	ATOM	384	CB	LYS	871	20.709	12.161	47.292	1.00	23.83
	ATOM	385	CG	LYS	871	19.765	13.307	47.137	1.00	25.73
	ATOM	386	CD	LYS	871	18.479	12.830	46.470	1.00	30.12
	ATOM	387	CE	LYS	871	17.896	11.498	47.018	1.00	34.14
	ATOM	388	NZ	LYS	871	16.475	11.293	46.594	1.00	39.66
25	ATOM	389	C	LYS	871	22.409	10.856	48.471	1.00	24.48
	ATOM	390	O	LYS	871	23.201	10.175	47.813	1.00	21.82
	ATOM	391	N	GLU	872	21.799	10.349	49.553	1.00	28.40
	ATOM	392	CA	GLU	872	22.126	8.954	49.875	1.00	29.30
	ATOM	393	CB	GLU	872	21.425	8.507	51.198	1.00	30.78
30	ATOM	394	CG	GLU	872	22.525	7.519	51.857	1.00	38.75
	ATOM	395	CD	GLU	872	24.013	8.100	51.947	1.00	45.91
	ATOM	396	OE1	GLU	872	24.815	8.079	50.951	1.00	45.36
	ATOM	397	OE2	GLU	872	24.341	8.586	53.054	1.00	47.86
	ATOM	398	C	GLU	872	21.736	8.036	48.703	1.00	25.81
35	ATOM	399	O	GLU	872	20.761	8.284	48.024	1.00	28.71
	ATOM	400	N	GLY	873	22.397	6.939	48.426	1.00	24.43
	ATOM	401	CA	GLY	873	21.997	6.148	47.254	1.00	20.71
	ATOM	402	C	GLY	873	23.114	6.367	46.289	1.00	22.81
	ATOM	403	O	GLY	873	23.565	5.483	45.546	1.00	24.53
40	ATOM	404	N	ALA	874	23.619	7.598	46.313	1.00	21.14
	ATOM	405	CA	ALA	874	24.724	7.870	45.435	1.00	19.95
	ATOM	406	CB	ALA	874	25.204	9.288	45.625	1.00	25.40
	ATOM	407	C	ALA	874	25.835	6.935	45.790	1.00	18.22
	ATOM	408	O	ALA	874	25.837	6.341	46.841	1.00	15.23
45	ATOM	409	N	THR	875	26.813	6.807	44.938	1.00	17.56
	ATOM	410	CA	THR	875	27.924	5.921	45.229	1.00	19.35
	ATOM	411	CB	THR	875	27.751	4.504	44.588	1.00	21.50
	ATOM	412	OG1	THR	875	29.043	3.849	44.849	1.00	31.77
	ATOM	413	CG2	THR	875	27.377	4.461	43.084	1.00	19.53
50	ATOM	414	C	THR	875	29.160	6.567	44.719	1.00	19.06
	ATOM	415	O	THR	875	29.065	7.590	44.060	1.00	21.38
	ATOM	416	N	HIS	876	30.360	6.077	44.951	1.00	17.65
	ATOM	417	CA	HIS	876	31.534	6.772	44.466	1.00	14.58
	ATOM	418	CB	HIS	876	32.698	5.905	44.811	1.00	11.66
55	ATOM	419	CG	HIS	876	33.883	6.697	44.549	1.00	11.47
	ATOM	420	CD2	HIS	876	34.243	7.966	45.014	1.00	10.21
	ATOM	421	ND1	HIS	876	34.888	6.273	43.737	1.00	14.14
	ATOM	422	CE1	HIS	876	35.847	7.289	43.708	1.00	9.58
	ATOM	423	NE2	HIS	876	35.461	8.336	44.492	1.00	4.26
60	ATOM	424	C	HIS	876	31.403	7.086	42.981	1.00	20.51
	ATOM	425	O	HIS	876	31.767	8.170	42.550	1.00	23.99
	ATOM	426	N	SER	877	30.770	6.265	42.170	1.00	21.46

	ATOM	427	CA	SER	877	30.609	6.552	40.723	1.00	20.65
	ATOM	428	CB	SER	877	29.710	5.476	40.128	1.00	22.58
	ATOM	429	OG	SER	877	29.710	4.315	40.979	1.00	26.51
	ATOM	430	C	SER	877	30.005	7.940	40.470	1.00	20.33
5	ATOM	431	O	SER	877	30.464	8.702	39.631	1.00	21.60
	ATOM	432	N	GLU	878	28.952	8.320	41.180	1.00	18.48
	ATOM	433	CA	GLU	878	28.340	9.640	41.038	1.00	15.96
	ATOM	434	CB	GLU	878	27.093	9.798	41.803	1.00	16.55
	ATOM	435	CG	GLU	878	25.807	9.296	41.176	1.00	22.66
10	ATOM	436	CD	GLU	878	25.887	7.834	40.946	1.00	22.99
	ATOM	437	OE1	GLU	878	26.141	7.110	41.914	1.00	22.41
	ATOM	438	OE2	GLU	878	25.702	7.474	39.785	1.00	26.52
	ATOM	439	C	GLU	878	29.241	10.659	41.631	1.00	16.88
	ATOM	440	O	GLU	878	29.193	11.811	41.277	1.00	23.30
15	ATOM	441	N	HIS	879	29.964	10.363	42.685	1.00	15.49
	ATOM	442	CA	HIS	879	30.897	11.354	43.264	1.00	14.40
	ATOM	443	CB	HIS	879	31.460	10.816	44.591	1.00	15.34
	ATOM	444	CG	HIS	879	32.492	11.626	45.188	1.00	9.18
	ATOM	445	CD2	HIS	879	32.333	12.496	46.239	1.00	8.38
20	ATOM	446	ND1	HIS	879	33.774	11.634	44.754	1.00	8.38
	ATOM	447	CE1	HIS	879	34.458	12.508	45.510	1.00	8.72
	ATOM	448	NE2	HIS	879	33.568	13.033	46.416	1.00	12.72
	ATOM	449	C	HIS	879	31.993	11.593	42.264	1.00	16.52
	ATOM	450	O	HIS	879	32.405	12.736	42.088	1.00	21.46
25	ATOM	451	N	ARG	880	32.587	10.589	41.615	1.00	16.05
	ATOM	452	CA	ARG	880	33.564	10.992	40.624	1.00	17.19
	ATOM	453	CB	ARG	880	34.367	9.812	40.178	1.00	17.18
	ATOM	454	CG	ARG	880	33.934	8.671	39.392	1.00	24.20
	ATOM	455	CD	ARG	880	35.133	7.671	39.502	1.00	28.49
30	ATOM	456	NE	ARG	880	34.463	6.345	39.604	1.00	37.60
	ATOM	457	CZ	ARG	880	34.812	5.366	40.451	1.00	35.68
	ATOM	458	NH1	ARG	880	34.117	4.255	40.441	1.00	30.70
	ATOM	459	NH2	ARG	880	35.873	5.433	41.251	1.00	40.55
	ATOM	460	C	ARG	880	32.867	11.698	39.458	1.00	19.11
35	ATOM	461	O	ARG	880	33.422	12.665	38.954	1.00	22.50
	ATOM	462	N	ALA	881	31.672	11.323	38.977	1.00	20.35
	ATOM	463	CA	ALA	881	30.971	12.098	37.899	1.00	17.73
	ATOM	464	CB	ALA	881	29.610	11.430	37.640	1.00	12.45
	ATOM	465	C	ALA	881	30.759	13.591	38.339	1.00	17.73
40	ATOM	466	O	ALA	881	30.858	14.528	37.544	1.00	20.46
	ATOM	467	N	LEU	882	30.363	13.899	39.600	1.00	18.91
	ATOM	468	CA	LEU	882	30.232	15.284	40.142	1.00	16.53
	ATOM	469	CB	LEU	882	29.564	15.084	41.472	1.00	15.08
	ATOM	470	CG	LEU	882	29.398	16.392	42.197	1.00	15.65
45	ATOM	471	CD1	LEU	882	28.532	17.237	41.323	1.00	18.07
	ATOM	472	CD2	LEU	882	28.788	16.239	43.595	1.00	10.57
	ATOM	473	C	LEU	882	31.642	16.027	40.217	1.00	18.25
	ATOM	474	O	LEU	882	31.804	17.259	40.108	1.00	17.22
	ATOM	475	N	MET	883	32.713	15.283	40.505	1.00	16.46
50	ATOM	476	CA	MET	883	34.072	15.867	40.495	1.00	19.48
	ATOM	477	CB	MET	883	35.126	14.805	40.961	1.00	21.02
	ATOM	478	CG	MET	883	35.787	15.371	42.191	1.00	25.11
	ATOM	479	SD	MET	883	36.774	16.786	41.735	1.00	30.13
	ATOM	480	CE	MET	883	36.324	17.720	43.174	1.00	25.58
55	ATOM	481	C	MET	883	34.352	16.283	39.040	1.00	17.59
	ATOM	482	O	MET	883	34.888	17.341	38.735	1.00	20.53
	ATOM	483	N	SER	884	34.032	15.446	38.060	1.00	15.79
	ATOM	484	CA	SER	884	34.221	15.794	36.644	1.00	14.37
	ATOM	485	CB	SER	884	33.899	14.603	35.753	1.00	16.81
60	ATOM	486	OG	SER	884	35.123	14.022	35.291	1.00	23.05
	ATOM	487	C	SER	884	33.332	16.975	36.198	1.00	15.23
	ATOM	488	O	SER	884	33.650	17.891	35.400	1.00	15.71

	ATOM	489	N	GLU	885	32.105	16.971	36.692	1.00	12.62
	ATOM	490	CA	GLU	885	31.259	18.088	36.335	1.00	9.20
	ATOM	491	CB	GLU	885	30.009	17.717	37.051	1.00	5.37
	ATOM	492	CG	GLU	885	29.200	18.981	36.826	1.00	11.61
5	ATOM	493	CD	GLU	885	27.801	18.839	37.258	1.00	13.93
	ATOM	494	OE1	GLU	885	27.351	17.748	37.536	1.00	16.89
	ATOM	495	OE2	GLU	885	27.174	19.848	37.318	1.00	15.79
	ATOM	496	C	GLU	885	31.943	19.458	36.723	1.00	9.01
	ATOM	497	O	GLU	885	31.895	20.487	36.053	1.00	10.45
10	ATOM	498	N	LEU	886	32.596	19.507	37.848	1.00	10.65
	ATOM	499	CA	LEU	886	33.315	20.696	38.416	1.00	13.37
	ATOM	500	CB	LEU	886	33.876	20.378	39.795	1.00	8.55
	ATOM	501	CG	LEU	886	34.819	21.374	40.443	1.00	10.16
	ATOM	502	CD1	LEU	886	34.097	22.640	40.770	1.00	8.44
15	ATOM	503	CD2	LEU	886	35.363	20.769	41.761	1.00	9.44
	ATOM	504	C	LEU	886	34.439	21.034	37.544	1.00	14.43
	ATOM	505	O	LEU	886	34.738	22.178	37.216	1.00	18.34
	ATOM	506	N	LYS	887	35.143	20.011	37.129	1.00	17.06
	ATOM	507	CA	LYS	887	36.277	20.289	36.224	1.00	16.87
20	ATOM	508	CB	LYS	887	37.077	18.957	36.277	1.00	14.08
	ATOM	509	C	LYS	887	35.757	20.813	34.784	1.00	18.96
	ATOM	510	O	LYS	887	36.319	21.670	34.092	1.00	20.08
	ATOM	511	N	ILE	888	34.646	20.331	34.241	1.00	19.51
	ATOM	512	CA	ILE	888	34.078	20.821	32.972	1.00	17.20
25	ATOM	513	CB	ILE	888	32.727	20.103	32.750	1.00	19.97
	ATOM	514	CG2	ILE	888	31.842	20.751	31.735	1.00	22.90
	ATOM	515	CG1	ILE	888	33.012	18.712	32.273	1.00	22.97
	ATOM	516	CD1	ILE	888	33.756	18.760	30.921	1.00	30.86
	ATOM	517	C	ILE	888	33.865	22.302	33.155	1.00	18.85
30	ATOM	518	O	ILE	888	34.316	23.118	32.362	1.00	23.14
	ATOM	519	N	LEU	889	33.168	22.689	34.234	1.00	17.36
	ATOM	520	CA	LEU	889	32.823	24.087	34.575	1.00	10.99
	ATOM	521	CB	LEU	889	32.084	24.146	35.943	1.00	10.17
	ATOM	522	CG	LEU	889	30.595	23.557	35.843	1.00	7.22
35	ATOM	523	CD1	LEU	889	29.986	23.126	37.170	1.00	7.93
	ATOM	524	CD2	LEU	889	29.649	24.656	35.478	1.00	3.71
	ATOM	525	C	LEU	889	34.024	24.899	34.620	1.00	11.47
	ATOM	526	O	LEU	889	34.065	26.020	34.154	1.00	15.72
	ATOM	527	N	ILE	890	35.066	24.405	35.186	1.00	11.96
40	ATOM	528	CA	ILE	890	36.322	25.197	35.239	1.00	13.53
	ATOM	529	CB	ILE	890	37.359	24.530	36.270	1.00	12.08
	ATOM	530	CG2	ILE	890	38.627	25.345	36.206	1.00	7.44
	ATOM	531	CG1	ILE	890	36.851	24.438	37.724	1.00	11.21
	ATOM	532	CD1	ILE	890	37.843	23.417	38.377	1.00	5.47
45	ATOM	533	C	ILE	890	36.943	25.227	33.834	1.00	16.10
	ATOM	534	O	ILE	890	37.569	26.192	33.397	1.00	23.32
	ATOM	535	N	HIS	891	36.878	24.155	33.086	1.00	15.97
	ATOM	536	CA	HIS	891	37.475	24.099	31.748	1.00	18.49
	ATOM	537	CB	HIS	891	37.123	22.739	31.257	1.00	25.52
50	ATOM	538	CG	HIS	891	37.403	22.327	29.883	1.00	39.08
	ATOM	539	CD2	HIS	891	37.748	20.965	29.657	1.00	47.43
	ATOM	540	ND1	HIS	891	37.332	22.999	28.706	1.00	36.50
	ATOM	541	CE1	HIS	891	37.646	22.052	27.750	1.00	45.68
	ATOM	542	NE2	HIS	891	37.903	20.804	28.316	1.00	52.82
55	ATOM	543	C	HIS	891	36.872	25.215	30.901	1.00	18.99
	ATOM	544	O	HIS	891	37.592	25.918	30.242	1.00	19.59
	ATOM	545	N	ILE	892	35.540	25.332	30.923	1.00	16.55
	ATOM	546	CA	ILE	892	34.670	26.271	30.200	1.00	16.57
	ATOM	547	CB	ILE	892	33.147	25.834	30.355	1.00	17.81
60	ATOM	548	CG2	ILE	892	32.113	26.560	29.475	1.00	14.77
	ATOM	549	CG1	ILE	892	33.039	24.439	29.818	1.00	17.20
	ATOM	550	CD1	ILE	892	31.684	23.866	30.202	1.00	18.02

	ATOM	551	C	ILE	892	34.825	27.706	30.611	1.00	19.27
	ATOM	552	O	ILE	892	34.742	28.584	29.783	1.00	23.96
	ATOM	553	N	GLY	893	35.116	28.032	31.853	1.00	19.14
	ATOM	554	CA	GLY	893	35.224	29.431	32.202	1.00	17.73
5	ATOM	555	C	GLY	893	33.896	30.158	32.137	1.00	18.74
	ATOM	556	O	GLY	893	32.828	29.696	31.770	1.00	21.86
	ATOM	557	N	HIS	894	33.973	31.390	32.523	1.00	19.51
	ATOM	558	CA	HIS	894	32.842	32.271	32.585	1.00	19.67
	ATOM	559	CB	HIS	894	33.369	33.385	33.468	1.00	22.88
10	ATOM	560	CG	HIS	894	32.281	34.319	33.797	1.00	31.11
	ATOM	561	CD2	HIS	894	31.205	34.062	34.675	1.00	34.22
	ATOM	562	ND1	HIS	894	32.082	35.570	33.249	1.00	33.44
	ATOM	563	CE1	HIS	894	30.911	36.083	33.772	1.00	34.31
	ATOM	564	NE2	HIS	894	30.371	35.156	34.647	1.00	37.05
15	ATOM	565	C	HIS	894	32.125	32.782	31.353	1.00	18.43
	ATOM	566	O	HIS	894	32.730	33.206	30.371	1.00	18.52
	ATOM	567	N	HIS	895	30.801	32.955	31.480	1.00	14.90
	ATOM	568	CA	HIS	895	30.050	33.531	30.380	1.00	14.12
	ATOM	569	CB	HIS	895	29.814	32.537	29.223	1.00	13.87
20	ATOM	570	CG	HIS	895	29.106	33.224	28.095	1.00	8.87
	ATOM	571	CD2	HIS	895	29.677	33.876	27.019	1.00	8.51
	ATOM	572	ND1	HIS	895	27.763	33.439	28.022	1.00	11.01
	ATOM	573	CE1	HIS	895	27.529	34.214	26.922	1.00	9.89
	ATOM	574	NE2	HIS	895	28.709	34.481	26.304	1.00	6.18
25	ATOM	575	C	HIS	895	28.717	34.007	30.849	1.00	16.62
	ATOM	576	O	HIS	895	28.026	33.338	31.586	1.00	20.68
	ATOM	577	N	LEU	896	28.195	35.144	30.362	1.00	18.72
	ATOM	578	CA	LEU	896	26.885	35.591	30.884	1.00	15.99
	ATOM	579	CB	LEU	896	26.412	36.861	30.083	1.00	16.94
30	ATOM	580	CG	LEU	896	25.230	37.618	30.779	1.00	18.50
	ATOM	581	CD1	LEU	896	25.790	38.265	32.059	1.00	19.27
	ATOM	582	CD2	LEU	896	24.580	38.678	29.871	1.00	19.06
	ATOM	583	C	LEU	896	25.799	34.511	30.832	1.00	15.34
	ATOM	584	O	LEU	896	25.032	34.257	31.744	1.00	14.29
35	ATOM	585	N	ASN	897	25.748	33.872	29.694	1.00	15.82
	ATOM	586	CA	ASN	897	24.666	32.901	29.496	1.00	14.54
	ATOM	587	CB	ASN	897	24.192	33.005	28.013	1.00	14.37
	ATOM	588	CG	ASN	897	23.769	34.473	27.680	1.00	14.23
	ATOM	589	OD1	ASN	897	24.437	35.216	26.980	1.00	14.52
40	ATOM	590	ND2	ASN	897	22.779	35.059	28.271	1.00	12.07
	ATOM	591	C	ASN	897	25.000	31.531	29.888	1.00	15.84
	ATOM	592	O	ASN	897	24.353	30.649	29.378	1.00	17.61
	ATOM	593	N	VAL	898	26.083	31.259	30.592	1.00	16.01
	ATOM	594	CA	VAL	898	26.202	29.827	31.067	1.00	16.40
45	ATOM	595	CB	VAL	898	27.545	29.024	30.579	1.00	10.61
	ATOM	596	CG1	VAL	898	27.772	29.204	29.098	1.00	5.98
	ATOM	597	CG2	VAL	898	28.801	29.517	31.173	1.00	16.22
	ATOM	598	C	VAL	898	26.153	29.965	32.643	1.00	20.93
	ATOM	599	O	VAL	898	26.729	30.938	33.180	1.00	21.50
50	ATOM	600	N	VAL	899	25.360	29.178	33.437	1.00	22.66
	ATOM	601	CA	VAL	899	25.352	29.362	34.935	1.00	17.23
	ATOM	602	CB	VAL	899	24.317	28.411	35.625	1.00	17.12
	ATOM	603	CG1	VAL	899	24.739	26.943	35.593	1.00	13.70
	ATOM	604	CG2	VAL	899	24.162	28.846	37.058	1.00	12.86
55	ATOM	605	C	VAL	899	26.733	29.112	35.522	1.00	19.01
	ATOM	606	O	VAL	899	27.276	28.022	35.618	1.00	20.49
	ATOM	607	N	ASN	900	27.362	30.188	35.878	1.00	19.93
	ATOM	608	CA	ASN	900	28.702	30.103	36.425	1.00	20.69
	ATOM	609	CB	ASN	900	29.364	31.448	36.047	1.00	28.34
60	ATOM	610	CG	ASN	900	29.953	31.091	34.658	1.00	32.05
	ATOM	611	OD1	ASN	900	31.026	30.542	34.456	1.00	33.74
	ATOM	612	ND2	ASN	900	29.265	31.355	33.601	1.00	30.58



	ATOM	613	C	ASN	900	29.048	29.715	37.833	1.00	16.09
	ATOM	614	O	ASN	900	28.393	30.014	38.825	1.00	12.14
	ATOM	615	N	LEU	901	30.201	29.048	37.823	1.00	14.82
	ATOM	616	CA	LEU	901	30.885	28.515	38.994	1.00	13.72
5	ATOM	617	CB	LEU	901	31.958	27.497	38.492	1.00	6.02
	ATOM	618	CG	LEU	901	32.649	26.658	39.598	1.00	2.00
	ATOM	619	CD1	LEU	901	31.640	25.731	40.189	1.00	2.00
	ATOM	620	CD2	LEU	901	33.843	25.912	39.047	1.00	2.08
	ATOM	621	C	LEU	901	31.508	29.569	39.923	1.00	14.47
10	ATOM	622	O	LEU	901	32.429	30.300	39.519	1.00	17.14
	ATOM	623	N	LEU	902	31.027	29.556	41.192	1.00	12.25
	ATOM	624	CA	LEU	902	31.439	30.462	42.278	1.00	15.05
	ATOM	625	CB	LEU	902	30.184	30.788	43.123	1.00	11.81
	ATOM	626	CG	LEU	902	29.215	31.794	42.443	1.00	9.38
15	ATOM	627	CD1	LEU	902	27.875	31.868	43.184	1.00	4.41
	ATOM	628	CD2	LEU	902	29.964	33.130	42.342	1.00	8.98
	ATOM	629	C	LEU	902	32.566	30.026	43.208	1.00	18.79
	ATOM	630	O	LEU	902	33.431	30.791	43.663	1.00	21.69
	ATOM	631	N	GLY	903	32.501	28.746	43.547	1.00	20.37
20	ATOM	632	CA	GLY	903	33.493	28.087	44.428	1.00	21.53
	ATOM	633	C	GLY	903	33.201	26.614	44.464	1.00	19.61
	ATOM	634	O	GLY	903	32.335	26.096	43.756	1.00	23.64
	ATOM	635	N	ALA	904	33.855	25.899	45.340	1.00	21.35
	ATOM	636	CA	ALA	904	33.670	24.419	45.481	1.00	18.91
25	ATOM	637	CB	ALA	904	34.474	23.798	44.382	1.00	12.92
	ATOM	638	C	ALA	904	34.090	23.778	46.832	1.00	18.78
	ATOM	639	O	ALA	904	35.148	24.053	47.384	1.00	19.77
	ATOM	640	N	CYS	905	33.275	23.014	47.503	1.00	19.99
	ATOM	641	CA	CYS	905	33.732	22.336	48.730	1.00	22.16
30	ATOM	642	CB	CYS	905	32.643	22.224	49.733	1.00	23.70
	ATOM	643	SG	CYS	905	32.175	23.897	49.985	1.00	27.92
	ATOM	644	C	CYS	905	34.193	20.906	48.366	1.00	26.00
	ATOM	645	O	CYS	905	33.404	20.010	48.071	1.00	25.09
	ATOM	646	N	THR	906	35.514	20.752	48.223	1.00	29.25
35	ATOM	647	CA	THR	906	36.318	19.528	47.881	1.00	32.05
	ATOM	648	CB	THR	906	37.267	19.955	46.687	1.00	32.21
	ATOM	649	OG1	THR	906	36.495	19.773	45.503	1.00	34.54
	ATOM	650	CG2	THR	906	38.634	19.263	46.598	1.00	31.99
	ATOM	651	C	THR	906	37.118	18.929	49.059	1.00	34.88
40	ATOM	652	O	THR	906	37.675	17.850	48.928	1.00	35.78
	ATOM	653	N	LYS	907	37.224	19.526	50.253	1.00	38.01
	ATOM	654	CA	LYS	907	38.058	18.885	51.326	1.00	41.35
	ATOM	655	CB	LYS	907	38.201	19.814	52.622	1.00	43.73
	ATOM	656	CG	LYS	907	39.156	21.062	52.484	1.00	48.01
45	ATOM	657	CD	LYS	907	39.205	22.213	53.600	1.00	56.47
	ATOM	658	CE	LYS	907	38.325	23.584	53.660	1.00	57.48
	ATOM	659	NZ	LYS	907	36.981	23.498	54.317	1.00	53.54
	ATOM	660	C	LYS	907	37.557	17.503	51.800	1.00	40.98
	ATOM	661	O	LYS	907	36.395	17.382	52.162	1.00	41.98
50	ATOM	662	N	PRO	908	38.403	16.445	51.852	1.00	41.38
	ATOM	663	CD	PRO	908	39.750	16.379	51.252	1.00	42.56
	ATOM	664	CA	PRO	908	38.154	15.123	52.428	1.00	40.42
	ATOM	665	CB	PRO	908	39.532	14.761	52.976	1.00	41.35
	ATOM	666	CG	PRO	908	40.325	15.044	51.728	1.00	42.20
55	ATOM	667	C	PRO	908	37.038	14.851	53.434	1.00	39.77
	ATOM	668	O	PRO	908	36.174	13.975	53.214	1.00	39.42
	ATOM	669	N	GLY	909	37.099	15.548	54.562	1.00	37.56
	ATOM	670	CA	GLY	909	36.102	15.344	55.642	1.00	39.08
	ATOM	671	C	GLY	909	34.598	15.328	55.297	1.00	40.37
60	ATOM	672	O	GLY	909	33.779	15.008	56.171	1.00	40.25
	ATOM	673	N	GLY	910	34.226	15.652	54.039	1.00	39.29
	ATOM	674	CA	GLY	910	32.819	15.700	53.602	1.00	35.87

	ATOM	675	C	GLY	910	32.498	15.590	52.084	1.00	35.30
	ATOM	676	O	GLY	910	33.353	15.191	51.258	1.00	35.48
	ATOM	677	N	PRO	911	31.214	15.962	51.745	1.00	33.68
	ATOM	678	CD	PRO	911	30.266	16.483	52.764	1.00	30.51
5	ATOM	679	CA	PRO	911	30.462	15.844	50.452	1.00	29.99
	ATOM	680	CB	PRO	911	29.087	16.473	50.736	1.00	29.87
	ATOM	681	CG	PRO	911	28.902	16.158	52.179	1.00	30.21
	ATOM	682	C	PRO	911	30.860	16.290	49.024	1.00	28.55
	ATOM	683	O	PRO	911	30.343	15.710	48.092	1.00	29.45
10	ATOM	684	N	LEU	912	31.775	17.164	48.682	1.00	24.28
	ATOM	685	CA	LEU	912	31.926	17.583	47.251	1.00	21.33
	ATOM	686	CB	LEU	912	32.247	16.405	46.239	1.00	18.13
	ATOM	687	CG	LEU	912	32.249	16.888	44.761	1.00	15.15
	ATOM	688	CD1	LEU	912	33.297	17.944	44.590	1.00	10.60
15	ATOM	689	CD2	LEU	912	32.616	15.782	43.784	1.00	14.65
	ATOM	690	C	LEU	912	30.592	18.300	46.835	1.00	19.91
	ATOM	691	O	LEU	912	29.446	17.827	46.688	1.00	19.47
	ATOM	692	N	MET	913	30.781	19.618	46.909	1.00	17.86
	ATOM	693	CA	MET	913	29.734	20.577	46.604	1.00	12.54
20	ATOM	694	CB	MET	913	29.500	21.414	47.866	1.00	13.81
	ATOM	695	CG	MET	913	28.938	20.461	48.945	1.00	15.32
	ATOM	696	SD	MET	913	28.524	21.381	50.381	1.00	20.78
	ATOM	697	CE	MET	913	26.977	20.631	50.725	1.00	7.67
	ATOM	698	C	MET	913	30.222	21.413	45.482	1.00	14.29
25	ATOM	699	O	MET	913	31.399	21.806	45.509	1.00	11.82
	ATOM	700	N	VAL	914	29.404	21.562	44.409	1.00	15.66
	ATOM	701	CA	VAL	914	29.742	22.454	43.224	1.00	11.17
	ATOM	702	CB	VAL	914	29.502	21.830	41.861	1.00	10.37
	ATOM	703	CG1	VAL	914	29.970	22.826	40.775	1.00	4.14
30	ATOM	704	CG2	VAL	914	30.267	20.505	41.746	1.00	6.36
	ATOM	705	C	VAL	914	28.742	23.584	43.386	1.00	11.54
	ATOM	706	O	VAL	914	27.507	23.385	43.384	1.00	8.16
	ATOM	707	N	ILE	915	29.330	24.748	43.770	1.00	12.95
	ATOM	708	CA	ILE	915	28.569	26.020	44.085	1.00	10.65
35	ATOM	709	CB	ILE	915	29.259	26.740	45.250	1.00	6.19
	ATOM	710	CG2	ILE	915	28.386	27.841	45.762	1.00	5.76
	ATOM	711	CG1	ILE	915	29.510	25.744	46.361	1.00	6.42
	ATOM	712	CD1	ILE	915	30.256	26.243	47.575	1.00	4.34
	ATOM	713	C	ILE	915	28.420	26.997	42.938	1.00	11.96
40	ATOM	714	O	ILE	915	29.436	27.474	42.419	1.00	14.70
	ATOM	715	N	VAL	916	27.210	27.291	42.507	1.00	9.86
	ATOM	716	CA	VAL	916	27.110	28.234	41.428	1.00	8.13
	ATOM	717	CB	VAL	916	26.659	27.517	40.138	1.00	8.09
	ATOM	718	CG1	VAL	916	27.584	26.355	39.687	1.00	4.58
45	ATOM	719	CG2	VAL	916	25.272	27.040	40.398	1.00	7.77
	ATOM	720	C	VAL	916	26.115	29.334	41.828	1.00	13.91
	ATOM	721	O	VAL	916	25.484	29.315	42.903	1.00	12.37
	ATOM	722	N	GLU	917	26.011	30.346	40.950	1.00	16.12
	ATOM	723	CA	GLU	917	25.094	31.480	41.201	1.00	13.77
50	ATOM	724	CB	GLU	917	25.169	32.518	40.096	1.00	15.29
	ATOM	725	CG	GLU	917	24.622	32.071	38.758	1.00	19.03
	ATOM	726	CD	GLU	917	24.903	33.174	37.754	1.00	23.36
	ATOM	727	OE1	GLU	917	26.018	33.290	37.181	1.00	29.66
	ATOM	728	OE2	GLU	917	23.963	33.938	37.580	1.00	24.20
55	ATOM	729	C	GLU	917	23.718	31.035	41.280	1.00	12.19
	ATOM	730	O	GLU	917	23.383	29.916	40.891	1.00	14.59
	ATOM	731	N	PHE	918	22.943	31.828	41.940	1.00	10.59
	ATOM	732	CA	PHE	918	21.537	31.507	42.045	1.00	10.95
	ATOM	733	CB	PHE	918	21.136	31.874	43.389	1.00	11.29
60	ATOM	734	CG	PHE	918	19.716	31.681	43.644	1.00	9.81
	ATOM	735	CD1	PHE	918	19.233	30.413	43.803	1.00	4.01
	ATOM	736	CD2	PHE	918	18.911	32.802	43.846	1.00	9.25

	ATOM	737	CE1	PHE	918	17.921	30.274	44.200	1.00	8.95
	ATOM	738	CE2	PHE	918	17.589	32.641	44.238	1.00	12.65
	ATOM	739	CZ	PHE	918	17.092	31.369	44.421	1.00	7.31
	ATOM	740	C	PHE	918	20.859	32.337	40.988	1.00	13.15
5	ATOM	741	O	PHE	918	21.228	33.472	40.742	1.00	20.08
	ATOM	742	N	CYS	919	19.781	31.858	40.408	1.00	15.35
	ATOM	743	CA	CYS	919	19.005	32.483	39.341	1.00	13.38
	ATOM	744	CB	CYS	919	19.091	31.622	38.108	1.00	11.01
	ATOM	745	SG	CYS	919	20.815	31.595	37.566	1.00	13.57
10	ATOM	746	C	CYS	919	17.605	32.561	39.846	1.00	15.20
	ATOM	747	O	CYS	919	16.855	31.588	39.841	1.00	16.30
	ATOM	748	N	LYS	920	17.236	33.790	40.221	1.00	17.10
	ATOM	749	CA	LYS	920	15.921	34.091	40.819	1.00	17.53
	ATOM	750	CB	LYS	920	15.724	35.633	40.698	1.00	24.74
15	ATOM	751	CG	LYS	920	15.006	36.486	41.828	1.00	34.84
	ATOM	752	CD	LYS	920	15.634	36.439	43.312	1.00	45.35
	ATOM	753	CE	LYS	920	17.155	36.898	43.481	1.00	50.81
	ATOM	754	NZ	LYS	920	17.691	36.715	44.857	1.00	54.90
	ATOM	755	C	LYS	920	14.695	33.357	40.309	1.00	15.34
20	ATOM	756	O	LYS	920	13.969	32.710	41.066	1.00	14.09
	ATOM	757	N	PHE	921	14.431	33.354	39.012	1.00	16.41
	ATOM	758	CA	PHE	921	13.162	32.702	38.591	1.00	16.42
	ATOM	759	CB	PHE	921	12.623	33.474	37.407	1.00	15.56
	ATOM	760	CG	PHE	921	12.381	34.875	37.715	1.00	11.43
25	ATOM	761	CD1	PHE	921	11.133	35.301	38.188	1.00	13.96
	ATOM	762	CD2	PHE	921	13.409	35.789	37.490	1.00	10.80
	ATOM	763	CE1	PHE	921	10.931	36.669	38.421	1.00	10.85
	ATOM	764	CE2	PHE	921	13.230	37.144	37.722	1.00	7.88
	ATOM	765	CZ	PHE	921	11.982	37.556	38.182	1.00	9.57
30	ATOM	766	C	PHE	921	13.140	31.223	38.266	1.00	16.32
	ATOM	767	O	PHE	921	12.165	30.741	37.674	1.00	16.67
	ATOM	768	N	GLY	922	14.168	30.477	38.651	1.00	16.52
	ATOM	769	CA	GLY	922	14.168	29.028	38.346	1.00	17.83
	ATOM	770	C	GLY	922	14.324	28.705	36.867	1.00	17.56
35	ATOM	771	O	GLY	922	14.820	29.490	36.066	1.00	19.39
	ATOM	772	N	ASN	923	14.014	27.489	36.450	1.00	17.87
	ATOM	773	CA	ASN	923	14.117	27.141	35.005	1.00	17.70
	ATOM	774	CB	ASN	923	13.931	25.592	34.812	1.00	21.51
	ATOM	775	CG	ASN	923	12.501	25.170	34.961	1.00	23.57
40	ATOM	776	OD1	ASN	923	11.840	24.781	34.002	1.00	28.51
	ATOM	777	ND2	ASN	923	11.909	25.303	36.139	1.00	30.28
	ATOM	778	C	ASN	923	13.133	27.899	34.076	1.00	15.60
	ATOM	779	O	ASN	923	11.974	28.189	34.422	1.00	15.07
	ATOM	780	N	LEU	924	13.505	28.075	32.829	1.00	9.86
45	ATOM	781	CA	LEU	924	12.655	28.856	31.934	1.00	14.93
	ATOM	782	CB	LEU	924	13.603	29.259	30.756	1.00	14.02
	ATOM	783	CG	LEU	924	13.142	30.325	29.736	1.00	9.23
	ATOM	784	CD1	LEU	924	12.903	31.713	30.328	1.00	5.52
	ATOM	785	CD2	LEU	924	14.278	30.375	28.724	1.00	8.33
50	ATOM	786	C	LEU	924	11.322	28.218	31.489	1.00	17.10
	ATOM	787	O	LEU	924	10.310	28.867	31.240	1.00	16.34
	ATOM	788	N	SER	925	11.314	26.904	31.421	1.00	19.35
	ATOM	789	CA	SER	925	10.137	26.081	31.011	1.00	20.31
	ATOM	790	CB	SER	925	10.588	24.598	31.241	1.00	21.42
55	ATOM	791	OG	SER	925	9.633	23.628	30.799	1.00	20.73
	ATOM	792	C	SER	925	8.957	26.514	31.859	1.00	17.91
	ATOM	793	O	SER	925	8.102	27.311	31.508	1.00	20.23
	ATOM	794	N	THR	926	9.065	26.135	33.101	1.00	15.92
	ATOM	795	CA	THR	926	8.120	26.431	34.180	1.00	13.45
60	ATOM	796	CB	THR	926	8.743	25.960	35.573	1.00	14.56
	ATOM	797	OG1	THR	926	9.044	24.584	35.443	1.00	16.18
	ATOM	798	CG2	THR	926	7.826	26.099	36.817	1.00	17.03

	ATOM	799	C	THR	926	7.886	27.921	34.210	1.00	11.53
	ATOM	800	O	THR	926	6.769	28.326	34.470	1.00	14.49
	ATOM	801	N	TYR	927	8.901	28.750	33.996	1.00	12.04
	ATOM	802	CA	TYR	927	8.706	30.220	34.051	1.00	14.59
5	ATOM	803	CB	TYR	927	10.044	31.024	33.886	1.00	18.02
	ATOM	804	CG	TYR	927	9.816	32.493	33.942	1.00	17.50
	ATOM	805	CD1	TYR	927	9.521	33.125	35.143	1.00	19.43
	ATOM	806	CE1	TYR	927	9.246	34.505	35.166	1.00	16.89
	ATOM	807	CD2	TYR	927	9.841	33.262	32.778	1.00	18.83
10	ATOM	808	CE2	TYR	927	9.567	34.648	32.814	1.00	19.37
	ATOM	809	CZ	TYR	927	9.259	35.283	34.009	1.00	13.96
	ATOM	810	OH	TYR	927	8.862	36.619	34.041	1.00	15.28
	ATOM	811	C	TYR	927	7.790	30.625	32.958	1.00	12.39
	ATOM	812	O	TYR	927	6.791	31.270	33.247	1.00	14.14
15	ATOM	813	N	LEU	928	8.046	30.233	31.699	1.00	10.10
	ATOM	814	CA	LEU	928	7.110	30.634	30.609	1.00	10.25
	ATOM	815	CB	LEU	928	7.738	30.164	29.267	1.00	7.34
	ATOM	816	CG	LEU	928	9.009	31.000	29.029	1.00	6.92
	ATOM	817	CD1	LEU	928	9.777	30.451	27.844	1.00	2.00
20	ATOM	818	CD2	LEU	928	8.648	32.477	28.947	1.00	2.64
	ATOM	819	C	LEU	928	5.639	30.122	30.809	1.00	12.50
	ATOM	820	O	LEU	928	4.710	30.945	30.807	1.00	12.33
	ATOM	821	N	ARG	929	5.313	28.830	31.140	1.00	14.38
	ATOM	822	CA	ARG	929	3.827	28.493	31.282	1.00	17.18
25	ATOM	823	CB	ARG	929	3.486	26.957	31.429	1.00	12.94
	ATOM	824	CG	ARG	929	4.696	26.159	31.537	1.00	19.00
	ATOM	825	CD	ARG	929	4.358	24.714	31.794	1.00	23.47
	ATOM	826	NE	ARG	929	5.476	24.261	32.690	1.00	32.26
	ATOM	827	CZ	ARG	929	6.548	23.547	32.254	1.00	37.30
30	ATOM	828	NH1	ARG	929	7.508	23.210	33.140	1.00	39.58
	ATOM	829	NH2	ARG	929	6.634	23.103	30.968	1.00	39.60
	ATOM	830	C	ARG	929	3.085	29.189	32.413	1.00	18.46
	ATOM	831	O	ARG	929	1.859	29.103	32.633	1.00	22.68
	ATOM	832	N	SER	930	3.825	29.950	33.167	1.00	19.35
35	ATOM	833	CA	SER	930	3.162	30.737	34.237	1.00	20.51
	ATOM	834	CB	SER	930	4.127	30.837	35.465	1.00	21.35
	ATOM	835	OG	SER	930	5.277	31.600	35.191	1.00	19.98
	ATOM	836	C	SER	930	2.771	32.115	33.712	1.00	17.66
	ATOM	837	O	SER	930	1.796	32.718	34.086	1.00	22.73
40	ATOM	838	N	LYS	931	3.469	32.639	32.747	1.00	17.58
	ATOM	839	CA	LYS	931	3.234	33.929	32.110	1.00	16.50
	ATOM	840	CB	LYS	931	4.568	34.472	31.621	1.00	14.67
	ATOM	841	CG	LYS	931	5.523	34.590	32.809	1.00	10.11
	ATOM	842	CD	LYS	931	4.886	35.488	33.893	1.00	17.46
45	ATOM	843	CE	LYS	931	4.747	36.972	33.491	1.00	14.85
	ATOM	844	NZ	LYS	931	6.062	37.586	33.339	1.00	22.64
	ATOM	845	C	LYS	931	2.241	33.900	30.937	1.00	20.01
	ATOM	846	O	LYS	931	2.066	34.863	30.195	1.00	19.29
	ATOM	847	N	ARG	932	1.380	32.892	30.860	1.00	22.21
50	ATOM	848	CA	ARG	932	0.395	32.774	29.749	1.00	20.74
	ATOM	849	CB	ARG	932	-0.341	31.406	29.889	1.00	22.59
	ATOM	850	CG	ARG	932	0.562	30.176	29.643	1.00	19.84
	ATOM	851	CD	ARG	932	0.975	30.212	28.173	1.00	15.47
	ATOM	852	NE	ARG	932	1.384	28.899	27.704	1.00	17.30
55	ATOM	853	CZ	ARG	932	0.453	27.957	27.479	1.00	23.01
	ATOM	854	NH1	ARG	932	0.858	26.754	27.021	1.00	19.75
	ATOM	855	NH2	ARG	932	-0.889	28.205	27.685	1.00	27.63
	ATOM	856	C	ARG	932	-0.600	33.896	29.709	1.00	19.71
	ATOM	857	O	ARG	932	-1.052	34.387	28.674	1.00	19.83
60	ATOM	858	N	ASN	933	-1.057	34.154	30.922	1.00	20.75
	ATOM	859	CA	ASN	933	-2.029	35.213	31.231	1.00	19.44
	ATOM	860	CB	ASN	933	-2.796	34.799	32.534	1.00	19.91

	ATOM	861	CG	ASN	933	-3.968	35.740	32.734	1.00	25.34
	ATOM	862	OD1	ASN	933	-5.007	35.778	32.096	1.00	32.98
	ATOM	863	ND2	ASN	933	-3.836	36.746	33.517	1.00	32.96
	ATOM	864	C	ASN	933	-1.236	36.508	31.427	1.00	18.77
5	ATOM	865	O	ASN	933	-1.778	37.501	31.895	1.00	20.59
	ATOM	866	N	GLU	934	0.080	36.551	31.151	1.00	16.50
	ATOM	867	CA	GLU	934	0.903	37.760	31.369	1.00	15.48
	ATOM	868	CB	GLU	934	1.652	37.703	32.736	1.00	17.27
	ATOM	869	CG	GLU	934	0.814	37.866	34.045	1.00	26.32
10	ATOM	870	CD	GLU	934	1.313	37.213	35.370	1.00	31.89
	ATOM	871	OE1	GLU	934	0.475	36.766	36.190	1.00	34.84
	ATOM	872	OE2	GLU	934	2.526	37.169	35.583	1.00	34.70
	ATOM	873	C	GLU	934	1.913	37.854	30.257	1.00	16.50
	ATOM	874	O	GLU	934	3.113	38.119	30.450	1.00	13.93
15	ATOM	875	N	PHE	935	1.290	37.859	29.071	1.00	18.94
	ATOM	876	CA	PHE	935	1.923	37.937	27.742	1.00	22.22
	ATOM	877	CB	PHE	935	2.139	36.463	27.153	1.00	23.60
	ATOM	878	CG	PHE	935	2.757	36.540	25.821	1.00	19.64
	ATOM	879	CD1	PHE	935	1.969	36.483	24.694	1.00	16.40
20	ATOM	880	CD2	PHE	935	4.131	36.726	25.725	1.00	20.23
	ATOM	881	CE1	PHE	935	2.589	36.615	23.457	1.00	17.74
	ATOM	882	CE2	PHE	935	4.747	36.857	24.480	1.00	19.05
	ATOM	883	CZ	PHE	935	3.964	36.798	23.345	1.00	15.52
	ATOM	884	C	PHE	935	1.141	38.794	26.703	1.00	24.21
25	ATOM	885	O	PHE	935	-0.082	38.809	26.600	1.00	24.17
	ATOM	886	N	VAL	936	1.919	39.496	25.879	1.00	24.70
	ATOM	887	CA	VAL	936	1.445	40.418	24.849	1.00	25.86
	ATOM	888	CB	VAL	936	1.074	41.820	25.384	1.00	27.85
	ATOM	889	CG1	VAL	936	-0.379	42.103	25.146	1.00	28.02
30	ATOM	890	CG2	VAL	936	1.352	41.913	26.870	1.00	31.62
	ATOM	891	C	VAL	936	2.608	40.683	23.963	1.00	27.45
	ATOM	892	O	VAL	936	3.701	40.874	24.471	1.00	29.60
	ATOM	893	N	PRO	937	2.478	40.713	22.659	1.00	29.49
	ATOM	894	CD	PRO	937	1.437	40.018	21.919	1.00	26.87
35	ATOM	895	CA	PRO	937	3.586	41.274	21.797	1.00	29.05
	ATOM	896	CB	PRO	937	3.378	40.542	20.479	1.00	28.15
	ATOM	897	CG	PRO	937	2.389	39.437	20.896	1.00	30.32
	ATOM	898	C	PRO	937	3.618	42.811	21.660	1.00	33.07
	ATOM	899	O	PRO	937	4.240	43.355	20.748	1.00	36.47
40	ATOM	900	N	TYR	938	2.803	43.461	22.445	1.00	33.52
	ATOM	901	CA	TYR	938	2.633	44.908	22.552	1.00	36.34
	ATOM	902	CB	TYR	938	1.252	45.164	23.204	1.00	33.55
	ATOM	903	C	TYR	938	3.759	45.348	23.529	1.00	43.79
	ATOM	904	O	TYR	938	3.550	46.042	24.577	1.00	44.25
45	ATOM	906	CB	PHE	999	4.464	40.578	32.665	1.00	40.01
	ATOM	907	CG	PHE	999	5.316	41.409	33.484	1.00	48.27
	ATOM	908	CD1	PHE	999	4.775	42.518	34.176	1.00	52.42
	ATOM	909	CD2	PHE	999	6.695	41.083	33.570	1.00	54.30
	ATOM	910	CE1	PHE	999	5.634	43.298	34.972	1.00	56.83
50	ATOM	911	CE2	PHE	999	7.572	41.861	34.368	1.00	57.48
	ATOM	912	CZ	PHE	999	7.023	42.970	35.063	1.00	59.76
	ATOM	913	C	PHE	999	5.452	40.809	30.465	1.00	31.92
	ATOM	914	O	PHE	999	6.477	41.497	30.324	1.00	31.70
	ATOM	915	N	PHE	999	2.882	41.274	30.947	1.00	34.46
55	ATOM	916	CA	PHE	999	4.321	41.318	31.396	1.00	33.30
	ATOM	917	N	LEU	1000	5.425	39.560	29.946	1.00	29.10
	ATOM	918	CA	LEU	1000	6.469	39.155	28.936	1.00	25.79
	ATOM	919	CB	LEU	1000	6.589	37.628	28.870	1.00	26.71
	ATOM	920	CG	LEU	1000	7.853	36.983	29.452	1.00	26.10
60	ATOM	921	CD1	LEU	1000	8.401	37.688	30.741	1.00	28.56
	ATOM	922	CD2	LEU	1000	7.450	35.514	29.656	1.00	23.97
	ATOM	923	C	LEU	1000	6.023	39.687	27.554	1.00	22.88

	ATOM	924	O	LEU	1000	4.829	39.908	27.340	1.00	20.05
	ATOM	925	N	THR	1001	6.913	39.828	26.571	1.00	23.18
	ATOM	926	CA	THR	1001	6.528	40.398	25.227	1.00	22.89
	ATOM	927	CB	THR	1001	6.830	41.929	25.115	1.00	21.27
5	ATOM	928	OG1	THR	1001	8.260	42.127	25.004	1.00	25.74
	ATOM	929	CG2	THR	1001	6.271	42.689	26.335	1.00	13.51
	ATOM	930	C	THR	1001	7.291	39.734	24.113	1.00	22.89
	ATOM	931	O	THR	1001	8.274	39.084	24.434	1.00	25.53
	ATOM	932	N	LEU	1002	6.977	39.840	22.831	1.00	24.27
10	ATOM	933	CA	LEU	1002	7.800	39.129	21.830	1.00	25.08
	ATOM	934	CB	LEU	1002	7.331	39.450	20.393	1.00	28.82
	ATOM	935	CG	LEU	1002	6.636	38.225	19.672	1.00	30.66
	ATOM	936	CD1	LEU	1002	6.073	38.723	18.321	1.00	31.00
	ATOM	937	CD2	LEU	1002	7.615	37.032	19.447	1.00	28.63
15	ATOM	938	C	LEU	1002	9.272	39.448	21.938	1.00	24.86
	ATOM	939	O	LEU	1002	10.146	38.604	21.732	1.00	25.70
	ATOM	940	N	GLU	1003	9.581	40.680	22.315	1.00	25.48
	ATOM	941	CA	GLU	1003	10.976	41.088	22.494	1.00	23.93
	ATOM	942	CB	GLU	1003	10.990	42.542	22.956	1.00	24.85
20	ATOM	943	CG	GLU	1003	12.433	43.006	22.644	1.00	30.01
	ATOM	944	CD	GLU	1003	12.816	44.454	23.007	1.00	34.08
	ATOM	945	OE1	GLU	1003	12.033	45.191	23.630	1.00	34.70
	ATOM	946	OE2	GLU	1003	13.949	44.815	22.651	1.00	34.12
	ATOM	947	C	GLU	1003	11.727	40.201	23.503	1.00	22.21
25	ATOM	948	O	GLU	1003	12.883	39.790	23.320	1.00	20.79
	ATOM	949	N	HIS	1004	11.068	39.932	24.640	1.00	21.60
	ATOM	950	CA	HIS	1004	11.627	39.092	25.719	1.00	20.99
	ATOM	951	CB	HIS	1004	10.628	38.938	26.870	1.00	21.66
	ATOM	952	CG	HIS	1004	10.442	40.112	27.728	1.00	21.59
30	ATOM	953	CD2	HIS	1004	9.354	40.949	27.818	1.00	23.86
	ATOM	954	ND1	HIS	1004	11.252	40.464	28.737	1.00	25.21
	ATOM	955	CE1	HIS	1004	10.704	41.483	29.456	1.00	22.61
	ATOM	956	NE2	HIS	1004	9.533	41.774	28.887	1.00	23.93
	ATOM	957	C	HIS	1004	11.875	37.704	25.114	1.00	24.15
35	ATOM	958	O	HIS	1004	12.967	37.141	25.217	1.00	27.39
	ATOM	959	N	LEU	1005	10.892	37.103	24.409	1.00	26.20
	ATOM	960	CA	LEU	1005	11.031	35.757	23.764	1.00	21.29
	ATOM	961	CB	LEU	1005	9.653	35.459	23.065	1.00	17.41
	ATOM	962	CG	LEU	1005	8.592	34.601	23.885	1.00	16.62
40	ATOM	963	CD1	LEU	1005	8.506	34.984	25.386	1.00	10.65
	ATOM	964	CD2	LEU	1005	7.264	34.707	23.120	1.00	9.60
	ATOM	965	C	LEU	1005	12.239	35.671	22.822	1.00	20.75
	ATOM	966	O	LEU	1005	12.906	34.610	22.761	1.00	23.00
	ATOM	967	N	ILE	1006	12.546	36.743	22.036	1.00	19.62
45	ATOM	968	CA	ILE	1006	13.770	36.705	21.146	1.00	19.79
	ATOM	969	CB	ILE	1006	13.649	37.684	19.920	1.00	17.52
	ATOM	970	CG2	ILE	1006	14.914	37.665	19.014	1.00	13.82
	ATOM	971	CG1	ILE	1006	12.431	37.211	19.103	1.00	20.39
	ATOM	972	CD1	ILE	1006	11.376	38.343	19.001	1.00	18.62
50	ATOM	973	C	ILE	1006	15.042	37.044	21.967	1.00	15.71
	ATOM	974	O	ILE	1006	16.143	36.559	21.723	1.00	15.24
	ATOM	975	N	CYS	1007	14.991	37.926	22.940	1.00	12.90
	ATOM	976	CA	CYS	1007	16.195	38.161	23.809	1.00	14.43
	ATOM	977	CB	CYS	1007	15.934	39.117	25.027	1.00	14.35
55	ATOM	978	SG	CYS	1007	17.469	39.814	25.432	1.00	22.10
	ATOM	979	C	CYS	1007	16.632	36.815	24.426	1.00	11.92
	ATOM	980	O	CYS	1007	17.780	36.396	24.297	1.00	14.55
	ATOM	981	N	TYR	1008	15.759	36.083	25.113	1.00	9.43
	ATOM	982	CA	TYR	1008	16.121	34.770	25.694	1.00	10.07
60	ATOM	983	CB	TYR	1008	14.845	34.153	26.260	1.00	8.24
	ATOM	984	CG	TYR	1008	14.196	34.891	27.358	1.00	7.95
	ATOM	985	CD1	TYR	1008	12.863	34.515	27.591	1.00	6.21

	ATOM	986	CE1	TYR	1008	12.139	35.125	28.655	1.00	8.81
	ATOM	987	CD2	TYR	1008	14.809	35.879	28.193	1.00	7.32
	ATOM	988	CE2	TYR	1008	14.095	36.492	29.261	1.00	4.96
	ATOM	989	CZ	TYR	1008	12.746	36.099	29.472	1.00	7.54
5	ATOM	990	OH	TYR	1008	11.929	36.709	30.410	1.00	6.11
	ATOM	991	C	TYR	1008	16.740	33.833	24.617	1.00	10.83
	ATOM	992	O	TYR	1008	17.811	33.239	24.722	1.00	11.71
	ATOM	993	N	SER	1009	16.067	33.630	23.510	1.00	9.19
	ATOM	994	CA	SER	1009	16.620	32.791	22.422	1.00	8.22
10	ATOM	995	CB	SER	1009	15.637	32.909	21.204	1.00	10.29
	ATOM	996	OG	SER	1009	14.238	32.648	21.502	1.00	9.38
	ATOM	997	C	SER	1009	18.011	33.254	22.000	1.00	7.39
	ATOM	998	O	SER	1009	18.917	32.533	21.600	1.00	7.81
	ATOM	999	N	PHE	1010	18.200	34.555	21.896	1.00	10.34
15	ATOM	1000	CA	PHE	1010	19.516	35.149	21.446	1.00	12.36
	ATOM	1001	CB	PHE	1010	19.281	36.714	21.330	1.00	9.03
	ATOM	1002	CG	PHE	1010	20.549	37.438	21.150	1.00	7.58
	ATOM	1003	CD1	PHE	1010	20.907	38.439	22.074	1.00	9.07
	ATOM	1004	CD2	PHE	1010	21.395	37.145	20.058	1.00	6.81
20	ATOM	1005	CE1	PHE	1010	22.125	39.135	21.869	1.00	7.66
	ATOM	1006	CE2	PHE	1010	22.622	37.841	19.838	1.00	6.56
	ATOM	1007	CZ	PHE	1010	22.969	38.840	20.758	1.00	7.83
	ATOM	1008	C	PHE	1010	20.635	34.752	22.447	1.00	13.46
	ATOM	1009	O	PHE	1010	21.729	34.218	22.133	1.00	13.49
25	ATOM	1010	N	GLN	1011	20.316	35.045	23.712	1.00	11.51
	ATOM	1011	CA	GLN	1011	21.184	34.700	24.795	1.00	12.47
	ATOM	1012	CB	GLN	1011	20.514	35.076	26.070	1.00	15.52
	ATOM	1013	CG	GLN	1011	20.419	36.611	26.342	1.00	15.85
	ATOM	1014	CD	GLN	1011	20.072	36.846	27.827	1.00	16.04
30	ATOM	1015	OE1	GLN	1011	20.793	36.553	28.768	1.00	12.73
	ATOM	1016	NE2	GLN	1011	18.941	37.380	28.163	1.00	14.27
	ATOM	1017	C	GLN	1011	21.452	33.230	24.773	1.00	15.13
	ATOM	1018	O	GLN	1011	22.616	32.802	24.694	1.00	19.14
	ATOM	1019	N	VAL	1012	20.454	32.341	24.735	1.00	13.27
35	ATOM	1020	CA	VAL	1012	20.834	30.887	24.747	1.00	9.31
	ATOM	1021	CB	VAL	1012	19.624	29.925	24.612	1.00	6.49
	ATOM	1022	CG1	VAL	1012	20.154	28.502	24.585	1.00	2.73
	ATOM	1023	CG2	VAL	1012	18.669	30.016	25.753	1.00	2.00
	ATOM	1024	C	VAL	1012	21.755	30.594	23.586	1.00	12.25
40	ATOM	1025	O	VAL	1012	22.578	29.683	23.659	1.00	19.11
	ATOM	1026	N	ALA	1013	21.696	31.326	22.456	1.00	13.53
	ATOM	1027	CA	ALA	1013	22.592	31.044	21.317	1.00	6.32
	ATOM	1028	CB	ALA	1013	21.964	31.650	20.149	1.00	8.83
	ATOM	1029	C	ALA	1013	23.950	31.614	21.573	1.00	8.78
45	ATOM	1030	O	ALA	1013	25.010	31.077	21.229	1.00	12.21
	ATOM	1031	N	LYS	1014	24.025	32.751	22.211	1.00	12.34
	ATOM	1032	CA	LYS	1014	25.339	33.323	22.558	1.00	8.79
	ATOM	1033	CB	LYS	1014	25.147	34.700	23.247	1.00	11.20
	ATOM	1034	CG	LYS	1014	25.368	36.069	22.506	1.00	10.64
50	ATOM	1035	CD	LYS	1014	26.804	36.593	22.371	1.00	13.71
	ATOM	1036	CE	LYS	1014	27.942	35.672	21.717	1.00	26.46
	ATOM	1037	NZ	LYS	1014	28.610	34.454	22.391	1.00	21.27
	ATOM	1038	C	LYS	1014	25.965	32.319	23.478	1.00	8.87
	ATOM	1039	O	LYS	1014	27.056	31.811	23.231	1.00	12.10
55	ATOM	1040	N	GLY	1015	25.277	31.920	24.546	1.00	8.80
	ATOM	1041	CA	GLY	1015	25.804	30.912	25.519	1.00	10.47
	ATOM	1042	C	GLY	1015	26.298	29.605	24.856	1.00	12.36
	ATOM	1043	O	GLY	1015	27.364	29.065	25.211	1.00	14.38
	ATOM	1044	N	MET	1016	25.533	29.054	23.883	1.00	12.50
60	ATOM	1045	CA	MET	1016	25.922	27.846	23.160	1.00	7.67
	ATOM	1046	CB	MET	1016	24.721	27.421	22.479	1.00	8.23
	ATOM	1047	CG	MET	1016	23.792	26.768	23.495	1.00	6.76

	ATOM	1048	SD	MET	1016	24.330	25.226	24.289	1.00	11.91
	ATOM	1049	CE	MET	1016	25.166	24.010	23.256	1.00	10.16
	ATOM	1050	C	MET	1016	27.064	28.100	22.230	1.00	10.60
	ATOM	1051	O	MET	1016	27.912	27.220	22.062	1.00	10.59
5	ATOM	1052	N	GLU	1017	27.118	29.269	21.545	1.00	13.76
	ATOM	1053	CA	GLU	1017	28.302	29.612	20.664	1.00	12.29
	ATOM	1054	CB	GLU	1017	28.213	31.002	20.082	1.00	12.78
	ATOM	1055	CG	GLU	1017	29.421	31.459	19.235	1.00	13.10
	ATOM	1056	CD	GLU	1017	29.215	32.906	18.740	1.00	17.83
10	ATOM	1057	OE1	GLU	1017	28.630	33.731	19.444	1.00	16.75
	ATOM	1058	OE2	GLU	1017	29.684	33.242	17.640	1.00	18.08
	ATOM	1059	C	GLU	1017	29.555	29.613	21.518	1.00	13.94
	ATOM	1060	O	GLU	1017	30.652	29.214	21.167	1.00	16.64
	ATOM	1061	N	PHE	1018	29.454	30.144	22.704	1.00	15.68
15	ATOM	1062	CA	PHE	1018	30.568	30.121	23.655	1.00	14.51
	ATOM	1063	CB	PHE	1018	30.105	30.943	24.805	1.00	13.53
	ATOM	1064	CG	PHE	1018	31.129	30.839	25.825	1.00	18.42
	ATOM	1065	CD1	PHE	1018	30.919	29.998	26.944	1.00	18.19
	ATOM	1066	CD2	PHE	1018	32.332	31.550	25.660	1.00	19.24
20	ATOM	1067	CE1	PHE	1018	31.920	29.857	27.896	1.00	15.99
	ATOM	1068	CE2	PHE	1018	33.338	31.410	26.625	1.00	18.92
	ATOM	1069	CZ	PHE	1018	33.116	30.566	27.717	1.00	16.36
	ATOM	1070	C	PHE	1018	30.883	28.651	24.048	1.00	16.71
	ATOM	1071	O	PHE	1018	31.974	28.125	23.800	1.00	18.86
25	ATOM	1072	N	LEU	1019	29.934	27.876	24.607	1.00	17.49
	ATOM	1073	CA	LEU	1019	30.242	26.475	24.942	1.00	15.03
	ATOM	1074	CB	LEU	1019	29.008	25.565	25.256	1.00	17.22
	ATOM	1075	CG	LEU	1019	28.375	25.421	26.663	1.00	20.16
	ATOM	1076	CD1	LEU	1019	27.357	26.528	26.884	1.00	24.87
30	ATOM	1077	CD2	LEU	1019	27.542	24.122	26.767	1.00	19.99
	ATOM	1078	C	LEU	1019	30.916	25.814	23.774	1.00	15.18
	ATOM	1079	O	LEU	1019	31.941	25.197	24.027	1.00	13.03
	ATOM	1080	N	ALA	1020	30.457	26.017	22.498	1.00	17.41
	ATOM	1081	CA	ALA	1020	31.064	25.345	21.301	1.00	17.29
35	ATOM	1082	CB	ALA	1020	30.333	25.705	20.020	1.00	16.66
	ATOM	1083	C	ALA	1020	32.507	25.713	21.116	1.00	17.88
	ATOM	1084	O	ALA	1020	33.343	24.940	20.621	1.00	18.07
	ATOM	1085	N	SER	1021	32.819	26.944	21.513	1.00	19.46
	ATOM	1086	CA	SER	1021	34.225	27.457	21.446	1.00	19.60
40	ATOM	1087	CB	SER	1021	34.357	28.964	21.651	1.00	17.68
	ATOM	1088	OG	SER	1021	34.318	29.319	23.002	1.00	13.49
	ATOM	1089	C	SER	1021	35.152	26.867	22.485	1.00	20.90
	ATOM	1090	O	SER	1021	36.392	26.898	22.372	1.00	20.30
	ATOM	1091	N	ARG	1022	34.577	26.399	23.592	1.00	21.73
45	ATOM	1092	CA	ARG	1022	35.462	25.737	24.626	1.00	23.29
	ATOM	1093	CB	ARG	1022	34.811	25.955	26.002	1.00	19.06
	ATOM	1094	CG	ARG	1022	34.436	27.421	26.140	1.00	17.26
	ATOM	1095	CD	ARG	1022	35.450	28.194	26.855	1.00	19.37
	ATOM	1096	NE	ARG	1022	36.787	27.968	26.300	1.00	26.51
50	ATOM	1097	CZ	ARG	1022	37.830	27.635	27.105	1.00	30.51
	ATOM	1098	NH1	ARG	1022	39.058	27.449	26.648	1.00	30.76
	ATOM	1099	NH2	ARG	1022	37.691	27.423	28.403	1.00	34.40
	ATOM	1100	C	ARG	1022	35.666	24.233	24.338	1.00	24.70
	ATOM	1101	O	ARG	1022	36.190	23.419	25.129	1.00	28.75
55	ATOM	1102	N	LYS	1023	35.209	23.898	23.135	1.00	24.60
	ATOM	1103	CA	LYS	1023	35.168	22.586	22.507	1.00	25.75
	ATOM	1104	CB	LYS	1023	36.572	21.973	22.331	1.00	28.02
	ATOM	1105	CG	LYS	1023	37.416	22.396	21.088	1.00	32.08
	ATOM	1106	CD	LYS	1023	38.674	23.188	21.514	1.00	39.21
60	ATOM	1107	CE	LYS	1023	39.415	23.966	20.377	1.00	43.64
	ATOM	1108	NZ	LYS	1023	38.492	24.745	19.504	1.00	46.60
	ATOM	1109	C	LYS	1023	34.309	21.647	23.330	1.00	27.20



	ATOM	1110	O	LYS	1023	34.536	20.430	23.341	1.00	29.16
	ATOM	1111	N	CYS	1024	33.216	22.170	23.943	1.00	25.20
	ATOM	1112	CA	CYS	1024	32.290	21.350	24.752	1.00	22.97
	ATOM	1113	CB	CYS	1024	32.024	21.919	26.204	1.00	24.60
5	ATOM	1114	SG	CYS	1024	33.496	21.834	27.256	1.00	27.46
	ATOM	1115	C	CYS	1024	30.949	21.214	24.145	1.00	22.69
	ATOM	1116	O	CYS	1024	30.597	22.004	23.266	1.00	23.17
	ATOM	1117	N	ILE	1025	30.172	20.167	24.530	1.00	23.95
	ATOM	1118	CA	ILE	1025	28.772	20.045	24.021	1.00	24.01
10	ATOM	1119	CB	ILE	1025	28.483	18.938	22.926	1.00	24.45
	ATOM	1120	CG2	ILE	1025	29.331	19.235	21.694	1.00	22.47
	ATOM	1121	CG1	ILE	1025	28.693	17.541	23.452	1.00	24.05
	ATOM	1122	CD1	ILE	1025	27.946	16.741	22.399	1.00	23.93
	ATOM	1123	C	ILE	1025	27.811	19.724	25.168	1.00	24.34
15	ATOM	1124	O	ILE	1025	28.232	19.170	26.175	1.00	24.92
	ATOM	1125	N	HIS	1026	26.528	20.119	25.082	1.00	21.91
	ATOM	1126	CA	HIS	1026	25.531	19.880	26.130	1.00	21.71
	ATOM	1127	CB	HIS	1026	24.482	21.060	26.080	1.00	15.99
	ATOM	1128	CG	HIS	1026	23.711	21.212	27.344	1.00	12.17
20	ATOM	1129	CD2	HIS	1026	23.826	22.288	28.229	1.00	11.55
	ATOM	1130	ND1	HIS	1026	22.791	20.350	27.874	1.00	9.32
	ATOM	1131	CE1	HIS	1026	22.344	20.900	29.055	1.00	9.74
	ATOM	1132	NE2	HIS	1026	22.982	22.082	29.273	1.00	9.81
	ATOM	1133	C	HIS	1026	24.778	18.500	26.173	1.00	24.15
25	ATOM	1134	O	HIS	1026	24.281	18.101	27.235	1.00	28.76
	ATOM	1135	N	ARG	1027	24.492	17.789	25.073	1.00	23.53
	ATOM	1136	CA	ARG	1027	23.777	16.463	25.126	1.00	21.22
	ATOM	1137	CB	ARG	1027	24.661	15.419	25.825	1.00	25.96
	ATOM	1138	CG	ARG	1027	26.030	15.349	25.153	1.00	32.50
30	ATOM	1139	CD	ARG	1027	27.073	14.472	25.899	1.00	36.29
	ATOM	1140	NE	ARG	1027	28.316	14.615	25.117	1.00	39.52
	ATOM	1141	CZ	ARG	1027	29.229	13.651	24.926	1.00	41.51
	ATOM	1142	NH1	ARG	1027	30.277	13.953	24.188	1.00	44.25
	ATOM	1143	NH2	ARG	1027	29.163	12.414	25.418	1.00	43.71
35	ATOM	1144	C	ARG	1027	22.407	16.453	25.806	1.00	17.92
	ATOM	1145	O	ARG	1027	21.758	15.413	25.910	1.00	19.10
	ATOM	1146	N	ASP	1028	21.900	17.621	26.186	1.00	15.64
	ATOM	1147	CA	ASP	1028	20.553	17.737	26.830	1.00	15.23
	ATOM	1148	CB	ASP	1028	20.546	17.245	28.325	1.00	14.18
40	ATOM	1149	CG	ASP	1028	19.131	17.007	28.843	1.00	14.38
	ATOM	1150	OD1	ASP	1028	18.931	16.472	29.925	1.00	16.10
	ATOM	1151	OD2	ASP	1028	18.190	17.325	28.152	1.00	16.65
	ATOM	1152	C	ASP	1028	20.005	19.145	26.865	1.00	14.95
	ATOM	1153	O	ASP	1028	19.554	19.655	27.896	1.00	18.74
45	ATOM	1154	N	LEU	1029	20.189	19.886	25.800	1.00	13.58
	ATOM	1155	CA	LEU	1029	19.651	21.246	25.798	1.00	10.75
	ATOM	1156	CB	LEU	1029	20.367	22.024	24.602	1.00	9.09
	ATOM	1157	CG	LEU	1029	20.078	23.537	24.517	1.00	8.22
	ATOM	1158	CD1	LEU	1029	20.337	24.394	25.802	1.00	3.38
50	ATOM	1159	CD2	LEU	1029	21.001	23.939	23.403	1.00	7.48
	ATOM	1160	C	LEU	1029	18.103	21.273	25.737	1.00	8.77
	ATOM	1161	O	LEU	1029	17.402	20.773	24.871	1.00	9.76
	ATOM	1162	N	ALA	1030	17.523	21.958	26.654	1.00	9.29
	ATOM	1163	CA	ALA	1030	16.107	22.109	26.746	1.00	7.15
55	ATOM	1164	CB	ALA	1030	15.526	20.914	27.417	1.00	8.65
	ATOM	1165	C	ALA	1030	15.908	23.296	27.649	1.00	8.44
	ATOM	1166	O	ALA	1030	16.748	23.592	28.475	1.00	10.85
	ATOM	1167	N	ALA	1031	14.753	23.923	27.625	1.00	12.49
	ATOM	1168	CA	ALA	1031	14.365	25.097	28.445	1.00	12.73
60	ATOM	1169	CB	ALA	1031	12.948	25.663	27.982	1.00	10.17
	ATOM	1170	C	ALA	1031	14.286	24.769	29.931	1.00	12.95
	ATOM	1171	O	ALA	1031	13.990	25.611	30.770	1.00	14.59

	ATOM	1172	N	ARG	1032	14.366	23.466	30.208	1.00	13.85
	ATOM	1173	CA	ARG	1032	14.326	22.995	31.575	1.00	15.78
	ATOM	1174	CB	ARG	1032	14.183	21.467	31.850	1.00	13.57
	ATOM	1175	CG	ARG	1032	13.618	20.390	31.039	1.00	10.77
5	ATOM	1176	CD	ARG	1032	14.523	19.160	31.032	1.00	14.09
	ATOM	1177	NE	ARG	1032	14.204	18.738	29.673	1.00	27.96
	ATOM	1178	CZ	ARG	1032	14.826	17.874	28.890	1.00	30.22
	ATOM	1179	NH1	ARG	1032	14.324	17.709	27.704	1.00	34.01
	ATOM	1180	NH2	ARG	1032	15.881	17.177	29.190	1.00	31.48
10	ATOM	1181	C	ARG	1032	15.720	23.263	32.060	1.00	15.85
	ATOM	1182	O	ARG	1032	15.945	23.521	33.230	1.00	22.30
	ATOM	1183	N	ASN	1033	16.710	23.067	31.217	1.00	13.17
	ATOM	1184	CA	ASN	1033	18.098	23.359	31.626	1.00	12.39
	ATOM	1185	CB	ASN	1033	18.990	22.368	30.928	1.00	12.29
15	ATOM	1186	CG	ASN	1033	18.859	21.067	31.706	1.00	10.75
	ATOM	1187	OD1	ASN	1033	18.642	20.957	32.904	1.00	13.32
	ATOM	1188	ND2	ASN	1033	19.015	19.989	31.019	1.00	8.36
	ATOM	1189	C	ASN	1033	18.555	24.813	31.335	1.00	10.12
	ATOM	1190	O	ASN	1033	19.707	25.173	31.091	1.00	8.07
20	ATOM	1191	N	ILE	1034	17.631	25.716	31.549	1.00	9.65
	ATOM	1192	CA	ILE	1034	17.878	27.152	31.280	1.00	9.59
	ATOM	1193	CB	ILE	1034	17.166	27.705	29.881	1.00	8.72
	ATOM	1194	CG2	ILE	1034	17.421	29.223	29.747	1.00	4.16
	ATOM	1195	CG1	ILE	1034	17.727	27.030	28.599	1.00	2.00
25	ATOM	1196	CD1	ILE	1034	19.183	27.284	28.284	1.00	2.00
	ATOM	1197	C	ILE	1034	17.293	27.890	32.469	1.00	7.90
	ATOM	1198	O	ILE	1034	16.117	27.767	32.801	1.00	10.47
	ATOM	1199	N	LEU	1035	18.179	28.459	33.221	1.00	6.72
30	ATOM	1200	CA	LEU	1035	17.726	29.211	34.376	1.00	11.07
	ATOM	1201	CB	LEU	1035	18.862	29.030	35.408	1.00	9.95
	ATOM	1202	CG	LEU	1035	18.992	27.664	35.962	1.00	7.14
	ATOM	1203	CD1	LEU	1035	20.175	27.736	36.878	1.00	10.75
	ATOM	1204	CD2	LEU	1035	17.905	27.268	36.899	1.00	8.13
	ATOM	1205	C	LEU	1035	17.407	30.706	34.031	1.00	8.32
35	ATOM	1206	O	LEU	1035	18.108	31.416	33.276	1.00	7.45
	ATOM	1207	N	LEU	1036	16.380	31.264	34.580	1.00	7.32
	ATOM	1208	CA	LEU	1036	16.133	32.699	34.227	1.00	14.45
	ATOM	1209	CB	LEU	1036	14.569	32.917	33.996	1.00	11.59
	ATOM	1210	CG	LEU	1036	14.322	34.394	33.755	1.00	9.60
40	ATOM	1211	CD1	LEU	1036	14.950	34.839	32.424	1.00	14.16
	ATOM	1212	CD2	LEU	1036	12.854	34.605	33.921	1.00	12.93
	ATOM	1213	C	LEU	1036	16.722	33.588	35.367	1.00	17.60
	ATOM	1214	O	LEU	1036	16.429	33.362	36.563	1.00	17.87
	ATOM	1215	N	SER	1037	17.352	34.701	35.052	1.00	16.95
45	ATOM	1216	CA	SER	1037	17.976	35.482	36.108	1.00	21.60
	ATOM	1217	CB	SER	1037	19.392	35.519	35.795	1.00	21.24
	ATOM	1218	OG	SER	1037	19.979	35.171	37.036	1.00	29.94
	ATOM	1219	C	SER	1037	17.402	36.872	36.303	1.00	25.47
	ATOM	1220	O	SER	1037	16.330	37.149	35.796	1.00	29.11
50	ATOM	1221	N	GLU	1038	17.924	37.780	37.135	1.00	27.41
	ATOM	1222	CA	GLU	1038	17.296	39.158	37.241	1.00	26.12
	ATOM	1223	CB	GLU	1038	17.870	39.911	38.452	1.00	27.66
	ATOM	1224	CG	GLU	1038	18.094	39.050	39.741	1.00	33.68
	ATOM	1225	CD	GLU	1038	19.366	38.145	39.594	1.00	37.77
55	ATOM	1226	OE1	GLU	1038	19.297	36.889	39.804	1.00	34.62
	ATOM	1227	OE2	GLU	1038	20.442	38.730	39.295	1.00	42.16
	ATOM	1228	C	GLU	1038	17.616	39.896	35.906	1.00	27.11
	ATOM	1229	O	GLU	1038	18.441	39.382	35.177	1.00	23.68
	ATOM	1230	N	LYS	1039	16.991	41.065	35.525	1.00	27.53
60	ATOM	1231	CA	LYS	1039	17.366	41.710	34.209	1.00	27.41
	ATOM	1232	CB	LYS	1039	18.853	42.086	33.906	1.00	30.99
	ATOM	1233	CG	LYS	1039	19.751	42.337	32.569	1.00	30.73

	ATOM	1234	CD	LYS	1039	19.416	43.069	31.176	1.00	29.53
	ATOM	1235	CE	LYS	1039	20.291	42.721	29.849	1.00	34.26
	ATOM	1236	NZ	LYS	1039	20.200	41.371	29.155	1.00	19.84
	ATOM	1237	C	LYS	1039	17.000	40.852	33.054	1.00	28.40
5	ATOM	1238	O	LYS	1039	17.224	41.276	31.966	1.00	31.49
	ATOM	1239	N	ASN	1040	16.430	39.646	33.093	1.00	30.89
	ATOM	1240	CA	ASN	1040	16.154	38.808	31.840	1.00	27.95
	ATOM	1241	CB	ASN	1040	15.517	39.598	30.638	1.00	26.17
	ATOM	1242	CG	ASN	1040	14.183	40.052	31.152	1.00	29.72
10	ATOM	1243	OD1	ASN	1040	13.195	39.336	31.369	1.00	29.29
	ATOM	1244	ND2	ASN	1040	14.113	41.328	31.349	1.00	30.67
	ATOM	1245	C	ASN	1040	17.345	38.104	31.257	1.00	25.37
	ATOM	1246	O	ASN	1040	17.330	37.744	30.080	1.00	26.26
	ATOM	1247	N	VAL	1041	18.400	38.029	32.111	1.00	20.70
15	ATOM	1248	CA	VAL	1041	19.606	37.287	31.734	1.00	17.90
	ATOM	1249	CB	VAL	1041	20.733	37.692	32.649	1.00	17.23
	ATOM	1250	CG1	VAL	1041	21.956	36.941	32.252	1.00	14.94
	ATOM	1251	CG2	VAL	1041	21.042	39.147	32.506	1.00	15.55
	ATOM	1252	C	VAL	1041	19.290	35.778	31.930	1.00	20.35
20	ATOM	1253	O	VAL	1041	18.772	35.319	32.960	1.00	20.35
	ATOM	1254	N	VAL	1042	19.425	35.010	30.862	1.00	20.41
	ATOM	1255	CA	VAL	1042	19.149	33.578	30.889	1.00	17.47
	ATOM	1256	CB	VAL	1042	18.381	33.387	29.566	1.00	17.98
	ATOM	1257	CG1	VAL	1042	18.805	32.180	28.828	1.00	20.72
25	ATOM	1258	CG2	VAL	1042	16.895	33.186	29.873	1.00	16.82
	ATOM	1259	C	VAL	1042	20.461	32.849	31.065	1.00	16.59
	ATOM	1260	O	VAL	1042	21.514	33.233	30.532	1.00	21.58
	ATOM	1261	N	LYS	1043	20.423	31.735	31.722	1.00	14.85
	ATOM	1262	CA	LYS	1043	21.647	30.982	31.944	1.00	12.92
30	ATOM	1263	CB	LYS	1043	22.001	31.039	33.452	1.00	13.81
	ATOM	1264	CG	LYS	1043	21.986	32.402	34.096	1.00	8.01
	ATOM	1265	CD	LYS	1043	23.236	33.167	33.866	1.00	7.29
	ATOM	1266	CE	LYS	1043	23.051	34.494	34.602	1.00	7.58
	ATOM	1267	NZ	LYS	1043	24.297	35.261	34.387	1.00	9.84
35	ATOM	1268	C	LYS	1043	21.607	29.499	31.526	1.00	12.86
	ATOM	1269	O	LYS	1043	20.828	28.742	32.069	1.00	14.73
	ATOM	1270	N	ILE	1044	22.429	28.985	30.629	1.00	14.98
	ATOM	1271	CA	ILE	1044	22.457	27.539	30.281	1.00	17.13
	ATOM	1272	CB	ILE	1044	23.360	27.319	29.037	1.00	16.46
40	ATOM	1273	CG2	ILE	1044	23.267	25.834	28.613	1.00	12.44
	ATOM	1274	CG1	ILE	1044	22.890	28.203	27.877	1.00	12.12
	ATOM	1275	CD1	ILE	1044	23.995	28.271	26.836	1.00	13.17
	ATOM	1276	C	ILE	1044	22.993	26.645	31.449	1.00	20.60
	ATOM	1277	O	ILE	1044	24.139	26.785	31.926	1.00	19.81
45	ATOM	1278	N	CYS	1045	22.164	25.756	32.030	1.00	19.57
	ATOM	1279	CA	CYS	1045	22.667	24.866	33.113	1.00	14.26
	ATOM	1280	CB	CYS	1045	21.934	25.290	34.342	1.00	8.88
	ATOM	1281	SG	CYS	1045	20.439	24.488	34.525	1.00	11.76
	ATOM	1282	C	CYS	1045	22.495	23.389	32.807	1.00	14.86
50	ATOM	1283	O	CYS	1045	22.250	22.960	31.659	1.00	16.38
	ATOM	1284	N	ASP	1046	22.658	22.527	33.769	1.00	14.35
	ATOM	1285	CA	ASP	1046	22.464	21.070	33.592	1.00	11.64
	ATOM	1286	CB	ASP	1046	23.774	20.484	33.021	1.00	11.65
	ATOM	1287	CG	ASP	1046	23.687	18.985	32.623	1.00	14.87
55	ATOM	1288	OD1	ASP	1046	24.717	18.329	32.606	1.00	19.21
	ATOM	1289	OD2	ASP	1046	22.633	18.421	32.331	1.00	15.98
	ATOM	1290	C	ASP	1046	22.073	20.459	34.928	1.00	11.06
	ATOM	1291	O	ASP	1046	22.933	20.242	35.767	1.00	11.13
	ATOM	1292	N	PHE	1047	20.803	20.297	35.246	1.00	12.22
60	ATOM	1293	CA	PHE	1047	20.420	19.705	36.538	1.00	17.30
	ATOM	1294	CB	PHE	1047	18.861	19.694	36.534	1.00	16.14
	ATOM	1295	CG	PHE	1047	18.244	21.031	36.763	1.00	19.11

	ATOM	1296	CD1	PHE	1047	18.631	22.185	36.025	1.00	24.17
	ATOM	1297	CD2	PHE	1047	17.229	21.153	37.712	1.00	18.47
	ATOM	1298	CE1	PHE	1047	18.032	23.445	36.206	1.00	22.86
	ATOM	1299	CE2	PHE	1047	16.609	22.405	37.918	1.00	21.80
5	ATOM	1300	CZ	PHE	1047	17.009	23.535	37.170	1.00	20.84
	ATOM	1301	C	PHE	1047	21.068	18.274	36.807	1.00	21.49
	ATOM	1302	O	PHE	1047	21.422	17.898	37.930	1.00	21.38
	ATOM	1303	N	GLY	1048	21.370	17.486	35.744	1.00	25.00
	ATOM	1304	CA	GLY	1048	21.911	16.111	35.811	1.00	26.41
10	ATOM	1305	C	GLY	1048	21.194	15.280	36.897	1.00	31.10
	ATOM	1306	O	GLY	1048	19.967	15.064	37.005	1.00	29.45
	ATOM	1307	N	LEU	1049	22.069	14.848	37.795	1.00	33.84
	ATOM	1308	CA	LEU	1049	21.749	14.045	38.992	1.00	33.89
	ATOM	1309	CB	LEU	1049	23.117	13.856	39.729	1.00	36.60
15	ATOM	1310	CG	LEU	1049	23.908	12.508	39.502	1.00	36.06
	ATOM	1311	CD1	LEU	1049	23.631	11.936	38.110	1.00	31.81
	ATOM	1312	CD2	LEU	1049	25.420	12.757	39.781	1.00	35.06
	ATOM	1313	C	LEU	1049	20.651	14.707	39.841	1.00	33.57
	ATOM	1314	O	LEU	1049	19.881	14.008	40.509	1.00	32.74
20	ATOM	1315	N	ALA	1050	20.590	16.032	39.904	1.00	32.32
	ATOM	1316	CA	ALA	1050	19.527	16.678	40.660	1.00	32.18
	ATOM	1317	CB	ALA	1050	20.012	18.062	40.964	1.00	32.22
	ATOM	1318	C	ALA	1050	18.154	16.693	39.950	1.00	31.65
	ATOM	1319	O	ALA	1050	17.227	17.395	40.335	1.00	30.44
25	ATOM	1320	N	ARG	1051	18.015	16.060	38.783	1.00	32.10
	ATOM	1321	CA	ARG	1051	16.677	15.960	38.138	1.00	34.15
	ATOM	1322	CB	ARG	1051	16.813	16.240	36.606	1.00	34.48
	ATOM	1323	CG	ARG	1051	15.613	16.324	35.651	1.00	34.50
	ATOM	1324	CD	ARG	1051	15.809	17.615	34.774	1.00	40.37
30	ATOM	1325	NE	ARG	1051	14.981	18.698	35.347	1.00	41.89
	ATOM	1326	CZ	ARG	1051	15.021	19.978	34.943	1.00	46.60
	ATOM	1327	NH1	ARG	1051	14.165	20.879	35.521	1.00	49.08
	ATOM	1328	NH2	ARG	1051	15.963	20.380	34.066	1.00	43.64
	ATOM	1329	C	ARG	1051	16.129	14.526	38.374	1.00	34.43
35	ATOM	1330	O	ARG	1051	16.843	13.534	38.432	1.00	33.40
	ATOM	1331	N	ASP	1052	14.821	14.392	38.579	1.00	36.26
	ATOM	1332	CA	ASP	1052	14.119	13.093	38.789	1.00	35.81
	ATOM	1333	CB	ASP	1052	12.668	13.377	39.117	1.00	39.58
	ATOM	1334	C	ASP	1052	14.141	12.355	37.468	1.00	36.55
40	ATOM	1335	O	ASP	1052	13.085	11.980	36.986	1.00	37.40
	ATOM	1336	N	ILE	1053	15.277	11.914	36.966	1.00	38.54
	ATOM	1337	CA	ILE	1053	15.345	11.307	35.616	1.00	39.37
	ATOM	1338	CB	ILE	1053	16.729	10.609	35.616	1.00	41.22
	ATOM	1339	CG2	ILE	1053	16.668	9.249	36.408	1.00	45.25
45	ATOM	1340	CG1	ILE	1053	17.198	10.427	34.178	1.00	39.81
	ATOM	1341	CD1	ILE	1053	18.206	9.263	34.004	1.00	36.48
	ATOM	1342	C	ILE	1053	14.137	10.393	35.235	1.00	40.72
	ATOM	1343	O	ILE	1053	13.649	10.500	34.109	1.00	43.18
	ATOM	1344	N	TYR	1054	13.625	9.508	36.159	1.00	42.36
50	ATOM	1345	CA	TYR	1054	12.462	8.582	35.923	1.00	41.24
	ATOM	1346	CB	TYR	1054	12.535	7.341	36.862	1.00	39.36
	ATOM	1347	C	TYR	1054	11.126	9.308	36.148	1.00	40.53
	ATOM	1348	O	TYR	1054	10.265	9.303	35.281	1.00	44.69
	ATOM	1349	N	LYS	1055	10.875	9.969	37.275	1.00	37.36
55	ATOM	1350	CA	LYS	1055	9.591	10.663	37.361	1.00	34.68
	ATOM	1351	CB	LYS	1055	9.426	11.280	38.718	1.00	37.20
	ATOM	1352	C	LYS	1055	9.454	11.789	36.318	1.00	33.87
	ATOM	1353	O	LYS	1055	8.377	12.340	36.134	1.00	34.44
	ATOM	1354	N	ASP	1056	10.499	12.216	35.633	1.00	33.29
60	ATOM	1355	CA	ASP	1056	10.371	13.315	34.667	1.00	33.11
	ATOM	1356	CB	ASP	1056	11.728	14.080	34.567	1.00	33.89
	ATOM	1357	CG	ASP	1056	11.704	15.503	34.021	1.00	34.80

	ATOM	1358	OD1	ASP	1056	12.684	16.211	34.195	1.00	35.70
	ATOM	1359	OD2	ASP	1056	10.738	15.908	33.409	1.00	37.37
	ATOM	1360	C	ASP	1056	9.930	12.851	33.298	1.00	34.02
	ATOM	1361	O	ASP	1056	10.700	12.301	32.511	1.00	33.10
5	ATOM	1362	N	PRO	1057	8.692	13.166	32.914	1.00	33.69
	ATOM	1363	CD	PRO	1057	7.750	14.112	33.554	1.00	32.54
	ATOM	1364	CA	PRO	1057	8.175	12.699	31.621	1.00	33.71
	ATOM	1365	CB	PRO	1057	6.750	13.198	31.639	1.00	33.12
	ATOM	1366	CG	PRO	1057	6.422	13.581	33.066	1.00	32.13
10	ATOM	1367	C	PRO	1057	8.989	13.161	30.384	1.00	35.16
	ATOM	1368	O	PRO	1057	8.691	12.821	29.219	1.00	35.30
	ATOM	1369	N	ASP	1058	9.956	14.073	30.585	1.00	37.33
	ATOM	1370	CA	ASP	1058	10.788	14.510	29.437	1.00	38.28
	ATOM	1371	CB	ASP	1058	11.566	15.760	29.803	1.00	41.23
15	ATOM	1372	CG	ASP	1058	10.576	16.867	30.028	1.00	42.94
	ATOM	1373	OD1	ASP	1058	10.320	17.229	31.146	1.00	48.53
	ATOM	1374	OD2	ASP	1058	10.034	17.379	29.088	1.00	43.27
	ATOM	1375	C	ASP	1058	11.763	13.438	28.985	1.00	39.06
	ATOM	1376	O	ASP	1058	12.518	13.572	28.018	1.00	38.16
20	ATOM	1377	N	TYR	1059	11.750	12.372	29.763	1.00	38.97
	ATOM	1378	CA	TYR	1059	12.599	11.237	29.496	1.00	40.37
	ATOM	1379	CB	TYR	1059	13.664	11.137	30.620	1.00	39.09
	ATOM	1380	CG	TYR	1059	14.416	12.377	30.788	1.00	34.71
	ATOM	1381	CD1	TYR	1059	13.822	13.393	31.508	1.00	35.47
25	ATOM	1382	CE1	TYR	1059	14.467	14.609	31.716	1.00	33.07
	ATOM	1383	CD2	TYR	1059	15.695	12.566	30.252	1.00	33.13
	ATOM	1384	CE2	TYR	1059	16.351	13.788	30.457	1.00	30.95
	ATOM	1385	CZ	TYR	1059	15.723	14.807	31.194	1.00	32.59
	ATOM	1386	OH	TYR	1059	16.309	16.035	31.427	1.00	30.28
30	ATOM	1387	C	TYR	1059	11.817	9.930	29.385	1.00	42.81
	ATOM	1388	O	TYR	1059	11.001	9.538	30.232	1.00	44.61
	ATOM	1389	N	VAL	1060	12.043	9.264	28.276	1.00	44.99
	ATOM	1390	CA	VAL	1060	11.391	7.956	28.031	1.00	46.04
	ATOM	1391	CB	VAL	1060	10.388	8.160	26.751	1.00	46.37
35	ATOM	1392	CG1	VAL	1060	10.389	9.610	26.263	1.00	45.91
	ATOM	1393	CG2	VAL	1060	10.788	7.335	25.536	1.00	47.67
	ATOM	1394	C	VAL	1060	12.630	6.996	27.923	1.00	45.16
	ATOM	1395	O	VAL	1060	13.781	7.432	27.651	1.00	42.16
	ATOM	1397	CB	LEU	1067	16.619	9.107	28.602	1.00	16.21
40	ATOM	1398	C	LEU	1067	15.638	10.753	26.994	1.00	18.14
	ATOM	1399	O	LEU	1067	14.446	10.779	27.239	1.00	21.96
	ATOM	1400	N	LEU	1067	17.334	8.922	26.070	1.00	15.93
	ATOM	1401	CA	LEU	1067	16.247	9.336	27.052	1.00	17.25
	ATOM	1402	N	PRO	1068	16.173	11.962	26.708	1.00	18.19
45	ATOM	1403	CD	PRO	1068	17.492	12.493	26.998	1.00	18.82
	ATOM	1404	CA	PRO	1068	15.342	13.168	26.405	1.00	19.76
	ATOM	1405	CB	PRO	1068	16.205	14.379	26.607	1.00	18.69
	ATOM	1406	CG	PRO	1068	17.527	13.804	26.181	1.00	15.97
	ATOM	1407	C	PRO	1068	14.844	13.164	24.978	1.00	22.47
50	ATOM	1408	O	PRO	1068	14.841	14.160	24.262	1.00	24.05
	ATOM	1409	N	LEU	1069	14.308	12.051	24.559	1.00	25.80
	ATOM	1410	CA	LEU	1069	13.836	11.872	23.152	1.00	27.31
	ATOM	1411	CB	LEU	1069	12.868	10.655	23.128	1.00	29.14
	ATOM	1412	CG	LEU	1069	13.527	9.272	23.165	1.00	26.96
55	ATOM	1413	CD1	LEU	1069	14.817	9.214	22.363	1.00	28.41
	ATOM	1414	CD2	LEU	1069	13.853	8.974	24.582	1.00	30.06
	ATOM	1415	C	LEU	1069	13.187	13.028	22.346	1.00	26.28
	ATOM	1416	O	LEU	1069	13.545	13.243	21.184	1.00	25.91
	ATOM	1417	N	LYS	1070	12.192	13.748	22.863	1.00	23.83
60	ATOM	1418	CA	LYS	1070	11.597	14.877	22.084	1.00	24.33
	ATOM	1419	CB	LYS	1070	10.502	15.512	22.884	1.00	19.23
	ATOM	1420	CG	LYS	1070	9.224	14.727	22.930	1.00	17.54

	ATOM	1421	CD	LYS	1070	8.661	15.393	24.157	1.00	15.01
	ATOM	1422	CE	LYS	1070	7.154	15.423	24.149	1.00	19.99
	ATOM	1423	NZ	LYS	1070	6.640	16.008	25.397	1.00	22.56
	ATOM	1424	C	LYS	1070	12.567	16.028	21.650	1.00	24.16
5	ATOM	1425	O	LYS	1070	12.229	16.901	20.847	1.00	22.41
	ATOM	1426	N	TRP	1071	13.749	16.022	22.259	1.00	22.16
	ATOM	1427	CA	TRP	1071	14.852	16.945	22.059	1.00	19.76
	ATOM	1428	CB	TRP	1071	15.377	17.316	23.394	1.00	19.72
	ATOM	1429	CG	TRP	1071	14.491	18.253	24.036	1.00	20.08
10	ATOM	1430	CD2	TRP	1071	13.375	18.035	24.901	1.00	19.07
	ATOM	1431	CE2	TRP	1071	12.853	19.314	25.203	1.00	17.22
	ATOM	1432	CE3	TRP	1071	12.728	16.895	25.429	1.00	18.68
	ATOM	1433	CD1	TRP	1071	14.614	19.637	23.877	1.00	20.86
	ATOM	1434	NE1	TRP	1071	13.619	20.248	24.592	1.00	21.10
15	ATOM	1435	CZ2	TRP	1071	11.737	19.449	26.032	1.00	20.35
	ATOM	1436	CZ3	TRP	1071	11.602	17.041	26.251	1.00	14.98
	ATOM	1437	CH2	TRP	1071	11.132	18.308	26.565	1.00	17.89
	ATOM	1438	C	TRP	1071	15.985	16.331	21.246	1.00	24.07
	ATOM	1439	O	TRP	1071	16.851	17.041	20.706	1.00	24.77
20	ATOM	1440	N	MET	1072	16.153	15.004	21.216	1.00	24.19
	ATOM	1441	CA	MET	1072	17.263	14.515	20.361	1.00	24.85
	ATOM	1442	CB	MET	1072	17.755	13.146	20.848	1.00	26.93
	ATOM	1443	CG	MET	1072	18.209	13.146	22.290	1.00	29.18
	ATOM	1444	SD	MET	1072	17.226	11.925	23.121	1.00	29.81
25	ATOM	1445	CE	MET	1072	18.537	10.717	22.702	1.00	29.51
	ATOM	1446	C	MET	1072	16.998	14.397	18.847	1.00	25.38
	ATOM	1447	O	MET	1072	16.013	13.955	18.260	1.00	26.31
	ATOM	1448	N	ALA	1073	17.995	14.769	18.145	1.00	26.67
	ATOM	1449	CA	ALA	1073	17.990	14.724	16.695	1.00	30.94
30	ATOM	1450	CB	ALA	1073	19.269	15.412	16.288	1.00	27.93
	ATOM	1451	C	ALA	1073	17.918	13.299	16.153	1.00	33.20
	ATOM	1452	O	ALA	1073	18.507	12.387	16.757	1.00	34.47
	ATOM	1453	N	PRO	1074	17.393	13.054	14.938	1.00	35.07
	ATOM	1454	CD	PRO	1074	17.203	13.984	13.798	1.00	34.57
35	ATOM	1455	CA	PRO	1074	17.243	11.642	14.524	1.00	33.65
	ATOM	1456	CB	PRO	1074	16.528	11.782	13.174	1.00	35.65
	ATOM	1457	CG	PRO	1074	17.127	13.060	12.562	1.00	35.25
	ATOM	1458	C	PRO	1074	18.641	11.019	14.507	1.00	31.99
	ATOM	1459	O	PRO	1074	18.947	9.949	15.009	1.00	32.29
40	ATOM	1460	N	GLU	1075	19.598	11.785	14.082	1.00	32.33
	ATOM	1461	CA	GLU	1075	20.971	11.280	14.014	1.00	32.52
	ATOM	1462	CB	GLU	1075	21.871	12.408	13.501	1.00	30.10
	ATOM	1463	CG	GLU	1075	21.332	13.820	13.617	1.00	29.26
	ATOM	1464	CD	GLU	1075	22.350	14.669	14.297	1.00	33.78
45	ATOM	1465	OE1	GLU	1075	21.935	15.533	15.048	1.00	34.15
	ATOM	1466	OE2	GLU	1075	23.555	14.506	14.092	1.00	40.63
	ATOM	1467	C	GLU	1075	21.507	10.711	15.315	1.00	33.53
	ATOM	1468	O	GLU	1075	22.383	9.852	15.298	1.00	32.69
	ATOM	1469	N	THR	1076	20.987	11.158	16.456	1.00	33.04
50	ATOM	1470	CA	THR	1076	21.447	10.672	17.793	1.00	35.38
	ATOM	1471	CB	THR	1076	21.341	11.752	18.873	1.00	33.16
	ATOM	1472	OG1	THR	1076	22.330	12.722	18.572	1.00	34.57
	ATOM	1473	CG2	THR	1076	21.512	11.227	20.287	1.00	32.98
	ATOM	1474	C	THR	1076	20.631	9.517	18.298	1.00	39.51
55	ATOM	1475	O	THR	1076	21.084	8.630	19.022	1.00	42.55
	ATOM	1476	N	ILE	1077	19.328	9.585	18.029	1.00	40.32
	ATOM	1477	CA	ILE	1077	18.403	8.510	18.462	1.00	37.59
	ATOM	1478	CB	ILE	1077	16.937	8.920	18.085	1.00	34.04
	ATOM	1479	CG2	ILE	1077	15.962	7.939	18.726	1.00	31.86
60	ATOM	1480	CG1	ILE	1077	16.614	10.347	18.547	1.00	29.32
	ATOM	1481	CD1	ILE	1077	15.305	10.845	17.916	1.00	31.98
	ATOM	1482	C	ILE	1077	18.874	7.279	17.679	1.00	39.48

	ATOM	1483	O	ILE	1077	19.414	6.313	18.198	1.00	40.38
	ATOM	1484	N	PHE	1078	18.816	7.411	16.364	1.00	41.61
	ATOM	1485	CA	PHE	1078	19.216	6.340	15.457	1.00	42.85
	ATOM	1486	CB	PHE	1078	18.747	6.792	14.052	1.00	45.20
5	ATOM	1487	CG	PHE	1078	17.249	6.950	14.040	1.00	47.36
	ATOM	1488	CD1	PHE	1078	16.648	8.220	14.165	1.00	48.67
	ATOM	1489	CD2	PHE	1078	16.403	5.824	13.888	1.00	48.07
	ATOM	1490	CE1	PHE	1078	15.248	8.367	14.136	1.00	48.08
	ATOM	1491	CE2	PHE	1078	15.003	5.962	13.856	1.00	45.18
10	ATOM	1492	CZ	PHE	1078	14.444	7.231	13.979	1.00	44.85
	ATOM	1493	C	PHE	1078	20.715	6.021	15.554	1.00	42.63
	ATOM	1494	O	PHE	1078	21.099	4.882	15.334	1.00	46.08
	ATOM	1495	N	ASP	1079	21.621	6.945	15.881	1.00	41.10
	ATOM	1496	CA	ASP	1079	23.068	6.579	16.001	1.00	39.23
15	ATOM	1497	CB	ASP	1079	23.749	7.208	14.809	1.00	40.84
	ATOM	1498	CG	ASP	1079	23.424	6.305	13.679	1.00	43.23
	ATOM	1499	OD1	ASP	1079	22.291	6.317	13.202	1.00	46.96
	ATOM	1500	OD2	ASP	1079	24.336	5.579	13.307	1.00	48.67
	ATOM	1501	C	ASP	1079	23.911	6.861	17.292	1.00	37.59
20	ATOM	1502	O	ASP	1079	25.147	6.821	17.305	1.00	31.47
	ATOM	1503	N	ARG	1080	23.262	7.204	18.395	1.00	35.50
	ATOM	1504	CA	ARG	1080	23.920	7.504	19.675	1.00	37.84
	ATOM	1505	CB	ARG	1080	24.260	6.138	20.311	1.00	40.66
	ATOM	1506	C	ARG	1080	25.148	8.431	19.485	1.00	36.95
25	ATOM	1507	O	ARG	1080	26.071	8.530	20.299	1.00	38.21
	ATOM	1508	N	VAL	1081	25.155	9.224	18.414	1.00	38.12
	ATOM	1509	CA	VAL	1081	26.274	10.147	18.165	1.00	37.82
	ATOM	1510	CB	VAL	1081	26.663	10.275	16.586	1.00	39.93
	ATOM	1511	CG1	VAL	1081	25.994	11.438	15.822	1.00	41.26
30	ATOM	1512	CG2	VAL	1081	28.226	10.511	16.504	1.00	45.80
	ATOM	1513	C	VAL	1081	25.874	11.464	18.723	1.00	34.37
	ATOM	1514	O	VAL	1081	24.731	11.846	18.533	1.00	32.84
	ATOM	1515	N	TYR	1082	26.734	12.077	19.537	1.00	32.85
	ATOM	1516	CA	TYR	1082	26.411	13.395	20.096	1.00	28.88
35	ATOM	1517	CB	TYR	1082	26.408	13.263	21.618	1.00	29.78
	ATOM	1518	CG	TYR	1082	25.267	12.501	22.151	1.00	29.56
	ATOM	1519	CD1	TYR	1082	25.303	11.134	22.490	1.00	31.41
	ATOM	1520	CE1	TYR	1082	24.132	10.538	23.056	1.00	31.06
	ATOM	1521	CD2	TYR	1082	24.109	13.217	22.379	1.00	29.37
40	ATOM	1522	CE2	TYR	1082	22.971	12.645	22.940	1.00	29.60
	ATOM	1523	CZ	TYR	1082	22.958	11.305	23.285	1.00	29.64
	ATOM	1524	OH	TYR	1082	21.787	10.865	23.894	1.00	28.12
	ATOM	1525	C	TYR	1082	27.413	14.461	19.622	1.00	29.31
	ATOM	1526	O	TYR	1082	28.620	14.239	19.624	1.00	29.70
45	ATOM	1527	N	THR	1083	26.922	15.625	19.172	1.00	28.05
	ATOM	1528	CA	THR	1083	27.694	16.787	18.652	1.00	24.04
	ATOM	1529	CB	THR	1083	27.890	16.817	17.113	1.00	27.53
	ATOM	1530	OG1	THR	1083	26.715	17.453	16.466	1.00	30.63
	ATOM	1531	CG2	THR	1083	28.037	15.398	16.548	1.00	27.92
50	ATOM	1532	C	THR	1083	26.948	18.065	18.915	1.00	22.06
	ATOM	1533	O	THR	1083	25.829	18.104	19.413	1.00	22.72
	ATOM	1534	N	ILE	1084	27.522	19.159	18.483	1.00	22.51
	ATOM	1535	CA	ILE	1084	26.960	20.516	18.620	1.00	24.42
	ATOM	1536	CB	ILE	1084	27.987	21.629	18.336	1.00	25.77
55	ATOM	1537	CG2	ILE	1084	27.563	22.787	19.295	1.00	21.98
	ATOM	1538	CG1	ILE	1084	29.448	21.308	18.685	1.00	29.43
	ATOM	1539	CD1	ILE	1084	30.288	20.059	18.210	1.00	35.16
	ATOM	1540	C	ILE	1084	25.840	20.678	17.586	1.00	26.52
	ATOM	1541	O	ILE	1084	24.811	21.327	17.779	1.00	26.59
60	ATOM	1542	N	GLN	1085	26.026	20.064	16.407	1.00	28.92
	ATOM	1543	CA	GLN	1085	24.978	20.170	15.374	1.00	27.89
	ATOM	1544	CB	GLN	1085	25.444	19.597	13.980	1.00	27.47

	ATOM	1545	CG	GLN	1085	26.253	20.699	13.198	1.00	26.63
	ATOM	1546	CD	GLN	1085	25.750	22.170	13.425	1.00	28.58
	ATOM	1547	OE1	GLN	1085	26.361	23.008	14.077	1.00	24.93
	ATOM	1548	NE2	GLN	1085	24.585	22.568	12.982	1.00	31.05
5	ATOM	1549	C	GLN	1085	23.820	19.456	15.938	1.00	26.72
	ATOM	1550	O	GLN	1085	22.698	19.736	15.557	1.00	28.76
	ATOM	1551	N	SER	1086	24.067	18.513	16.842	1.00	25.66
	ATOM	1552	CA	SER	1086	22.919	17.873	17.483	1.00	25.15
	ATOM	1553	CB	SER	1086	23.184	16.801	18.455	1.00	25.02
10	ATOM	1554	OG	SER	1086	24.047	15.845	17.919	1.00	30.26
	ATOM	1555	C	SER	1086	22.386	18.950	18.372	1.00	25.46
	ATOM	1556	O	SER	1086	21.192	19.233	18.327	1.00	27.32
	ATOM	1557	N	ASP	1087	23.221	19.532	19.259	1.00	23.21
	ATOM	1558	CA	ASP	1087	22.743	20.641	20.110	1.00	18.41
15	ATOM	1559	CB	ASP	1087	23.923	21.354	20.812	1.00	17.71
	ATOM	1560	CG	ASP	1087	24.561	20.522	21.956	1.00	16.65
	ATOM	1561	OD1	ASP	1087	25.742	20.671	22.274	1.00	15.69
	ATOM	1562	OD2	ASP	1087	23.860	19.750	22.574	1.00	14.37
	ATOM	1563	C	ASP	1087	21.960	21.646	19.297	1.00	15.77
20	ATOM	1564	O	ASP	1087	20.945	22.038	19.851	1.00	17.51
	ATOM	1565	N	VAL	1088	22.265	22.007	18.024	1.00	14.83
	ATOM	1566	CA	VAL	1088	21.433	22.982	17.236	1.00	13.42
	ATOM	1567	CB	VAL	1088	22.043	23.297	15.884	1.00	12.77
	ATOM	1568	CG1	VAL	1088	21.166	24.295	15.201	1.00	13.20
25	ATOM	1569	CG2	VAL	1088	23.460	23.904	16.019	1.00	5.18
	ATOM	1570	C	VAL	1088	20.067	22.370	17.033	1.00	14.86
	ATOM	1571	O	VAL	1088	19.110	23.116	17.102	1.00	19.88
	ATOM	1572	N	TRP	1089	19.856	21.055	16.787	1.00	16.34
	ATOM	1573	CA	TRP	1089	18.487	20.407	16.734	1.00	13.67
30	ATOM	1574	CB	TRP	1089	18.643	18.837	16.667	1.00	12.79
	ATOM	1575	CG	TRP	1089	17.347	18.112	16.532	1.00	13.47
	ATOM	1576	CD2	TRP	1089	16.712	17.664	15.311	1.00	12.90
	ATOM	1577	CE2	TRP	1089	15.353	17.383	15.615	1.00	16.02
	ATOM	1578	CE3	TRP	1089	17.167	17.482	13.982	1.00	14.82
35	ATOM	1579	CD1	TRP	1089	16.340	18.056	17.517	1.00	15.04
	ATOM	1580	NE1	TRP	1089	15.144	17.627	16.975	1.00	18.31
	ATOM	1581	CZ2	TRP	1089	14.488	16.940	14.599	1.00	13.72
	ATOM	1582	CZ3	TRP	1089	16.290	17.037	12.992	1.00	14.99
	ATOM	1583	CH2	TRP	1089	14.956	16.774	13.297	1.00	16.22
40	ATOM	1584	C	TRP	1089	17.717	20.771	18.047	1.00	16.06
	ATOM	1585	O	TRP	1089	16.695	21.460	18.047	1.00	17.98
	ATOM	1586	N	SER	1090	18.262	20.397	19.247	1.00	17.49
	ATOM	1587	CA	SER	1090	17.691	20.642	20.632	1.00	15.54
	ATOM	1588	CB	SER	1090	18.676	20.245	21.732	1.00	15.35
45	ATOM	1589	OG	SER	1090	19.095	18.912	21.523	1.00	17.99
	ATOM	1590	C	SER	1090	17.360	22.089	20.872	1.00	13.35
	ATOM	1591	O	SER	1090	16.468	22.455	21.634	1.00	14.62
	ATOM	1592	N	PHE	1091	18.177	22.960	20.311	1.00	15.03
	ATOM	1593	CA	PHE	1091	18.030	24.445	20.362	1.00	15.75
50	ATOM	1594	CB	PHE	1091	19.332	25.084	19.829	1.00	17.20
	ATOM	1595	CG	PHE	1091	19.146	26.547	19.897	1.00	21.06
	ATOM	1596	CD1	PHE	1091	19.273	27.223	21.112	1.00	18.67
	ATOM	1597	CD2	PHE	1091	18.770	27.274	18.729	1.00	19.43
	ATOM	1598	CE1	PHE	1091	19.020	28.603	21.151	1.00	16.31
55	ATOM	1599	CE2	PHE	1091	18.523	28.643	18.791	1.00	13.37
	ATOM	1600	CZ	PHE	1091	18.651	29.305	20.009	1.00	13.81
	ATOM	1601	C	PHE	1091	16.800	24.745	19.488	1.00	16.90
	ATOM	1602	O	PHE	1091	15.918	25.491	19.918	1.00	19.37
	ATOM	1603	N	GLY	1092	16.643	24.120	18.304	1.00	14.11
60	ATOM	1604	CA	GLY	1092	15.426	24.345	17.509	1.00	10.42
	ATOM	1605	C	GLY	1092	14.265	23.911	18.372	1.00	9.12
	ATOM	1606	O	GLY	1092	13.244	24.573	18.457	1.00	12.56



	ATOM	1607	N	VAL	1093	14.314	22.786	19.050	1.00	7.97
	ATOM	1608	CA	VAL	1093	13.151	22.452	19.920	1.00	7.51
	ATOM	1609	CB	VAL	1093	13.240	21.064	20.587	1.00	7.73
	ATOM	1610	CG1	VAL	1093	11.841	20.814	21.149	1.00	6.52
5	ATOM	1611	CG2	VAL	1093	13.609	19.922	19.653	1.00	8.95
	ATOM	1612	C	VAL	1093	13.035	23.471	21.075	1.00	10.99
	ATOM	1613	O	VAL	1093	11.929	23.859	21.488	1.00	14.40
	ATOM	1614	N	LEU	1094	14.167	23.888	21.682	1.00	9.45
	ATOM	1615	CA	LEU	1094	14.154	24.882	22.781	1.00	10.47
10	ATOM	1616	CB	LEU	1094	15.596	25.163	23.165	1.00	11.81
	ATOM	1617	CG	LEU	1094	15.969	25.530	24.616	1.00	14.94
	ATOM	1618	CD1	LEU	1094	17.407	25.917	24.477	1.00	16.24
	ATOM	1619	CD2	LEU	1094	15.293	26.716	25.263	1.00	12.17
	ATOM	1620	C	LEU	1094	13.425	26.171	22.329	1.00	13.22
15	ATOM	1621	O	LEU	1094	12.698	26.791	23.121	1.00	15.76
	ATOM	1622	N	LEU	1095	13.586	26.615	21.048	1.00	12.60
	ATOM	1623	CA	LEU	1095	12.854	27.794	20.445	1.00	8.78
	ATOM	1624	CB	LEU	1095	13.347	28.109	19.071	1.00	8.20
	ATOM	1625	CG	LEU	1095	14.697	28.744	19.140	1.00	4.85
20	ATOM	1626	CD1	LEU	1095	15.163	29.054	17.754	1.00	5.92
	ATOM	1627	CD2	LEU	1095	14.602	30.082	19.804	1.00	3.71
	ATOM	1628	C	LEU	1095	11.375	27.465	20.337	1.00	9.96
	ATOM	1629	O	LEU	1095	10.511	28.320	20.573	1.00	14.20
	ATOM	1630	N	TRP	1096	10.991	26.237	19.993	1.00	9.08
25	ATOM	1631	CA	TRP	1096	9.547	25.871	19.964	1.00	8.83
	ATOM	1632	CB	TRP	1096	9.389	24.382	19.657	1.00	8.41
	ATOM	1633	CG	TRP	1096	7.969	23.992	19.466	1.00	11.29
	ATOM	1634	CD2	TRP	1096	6.949	23.579	20.389	1.00	9.06
	ATOM	1635	CE2	TRP	1096	5.748	23.430	19.662	1.00	6.19
30	ATOM	1636	CE3	TRP	1096	6.931	23.346	21.758	1.00	9.71
	ATOM	1637	CD1	TRP	1096	7.300	24.051	18.224	1.00	13.67
	ATOM	1638	NE1	TRP	1096	5.978	23.714	18.358	1.00	12.75
	ATOM	1639	CZ2	TRP	1096	4.589	23.045	20.293	1.00	8.09
	ATOM	1640	CZ3	TRP	1096	5.731	22.961	22.380	1.00	8.82
35	ATOM	1641	CH2	TRP	1096	4.564	22.814	21.662	1.00	8.55
	ATOM	1642	C	TRP	1096	8.963	26.147	21.347	1.00	12.22
	ATOM	1643	O	TRP	1096	7.952	26.827	21.515	1.00	17.97
	ATOM	1644	N	GLU	1097	9.564	25.548	22.399	1.00	17.09
	ATOM	1645	CA	GLU	1097	9.205	25.686	23.874	1.00	15.70
40	ATOM	1646	CB	GLU	1097	10.313	25.004	24.757	1.00	15.25
	ATOM	1647	CG	GLU	1097	10.468	23.459	24.828	1.00	16.11
	ATOM	1648	CD	GLU	1097	11.425	23.035	25.947	1.00	18.88
	ATOM	1649	OE1	GLU	1097	10.960	22.633	27.023	1.00	25.86
	ATOM	1650	OE2	GLU	1097	12.633	23.102	25.751	1.00	15.17
45	ATOM	1651	C	GLU	1097	9.071	27.187	24.340	1.00	14.75
	ATOM	1652	O	GLU	1097	8.165	27.624	25.062	1.00	13.02
	ATOM	1653	N	ILE	1098	10.081	28.007	24.028	1.00	12.83
	ATOM	1654	CA	ILE	1098	10.004	29.435	24.326	1.00	9.33
	ATOM	1655	CB	ILE	1098	11.278	30.082	23.837	1.00	11.58
50	ATOM	1656	CG2	ILE	1098	11.074	31.590	23.919	1.00	17.93
	ATOM	1657	CG1	ILE	1098	12.482	29.702	24.672	1.00	14.18
	ATOM	1658	CD1	ILE	1098	13.757	30.435	24.263	1.00	14.72
	ATOM	1659	C	ILE	1098	8.799	30.042	23.595	1.00	10.94
	ATOM	1660	O	ILE	1098	7.866	30.485	24.256	1.00	12.04
55	ATOM	1661	N	PHE	1099	8.693	30.041	22.232	1.00	12.92
	ATOM	1662	CA	PHE	1099	7.507	30.674	21.532	1.00	12.03
	ATOM	1663	CB	PHE	1099	7.859	30.932	20.040	1.00	12.44
	ATOM	1664	CG	PHE	1099	9.014	31.834	19.955	1.00	8.48
	ATOM	1665	CD1	PHE	1099	10.305	31.350	20.089	1.00	3.92
60	ATOM	1666	CD2	PHE	1099	8.766	33.167	19.850	1.00	6.57
	ATOM	1667	CE1	PHE	1099	11.375	32.252	20.136	1.00	4.60
	ATOM	1668	CE2	PHE	1099	9.820	34.074	19.884	1.00	10.18

	ATOM	1669	CZ	PHE	1099	11.137	33.619	20.032	1.00	9.99
	ATOM	1670	C	PHE	1099	6.112	30.002	21.602	1.00	13.90
	ATOM	1671	O	PHE	1099	5.092	30.342	20.976	1.00	11.94
	ATOM	1672	N	SER	1100	6.062	28.919	22.325	1.00	16.29
5	ATOM	1673	CA	SER	1100	4.808	28.194	22.609	1.00	16.71
	ATOM	1674	CB	SER	1100	5.007	26.672	22.424	1.00	16.33
	ATOM	1675	OG	SER	1100	5.824	26.242	23.478	1.00	19.32
	ATOM	1676	C	SER	1100	4.504	28.515	24.081	1.00	15.92
	ATOM	1677	O	SER	1100	3.437	28.212	24.611	1.00	17.01
10	ATOM	1678	N	LEU	1101	5.429	29.276	24.697	1.00	15.51
	ATOM	1679	CA	LEU	1101	5.465	29.716	26.089	1.00	12.92
	ATOM	1680	CB	LEU	1101	4.355	30.699	26.458	1.00	8.06
	ATOM	1681	CG	LEU	1101	4.533	32.159	25.975	1.00	5.55
	ATOM	1682	CD1	LEU	1101	3.458	33.061	26.605	1.00	3.18
15	ATOM	1683	CD2	LEU	1101	5.882	32.654	26.345	1.00	3.84
	ATOM	1684	C	LEU	1101	5.369	28.576	27.107	1.00	15.40
	ATOM	1685	O	LEU	1101	4.431	28.526	27.890	1.00	14.78
	ATOM	1686	N	GLY	1102	6.357	27.669	27.144	1.00	15.65
	ATOM	1687	CA	GLY	1102	6.380	26.564	28.124	1.00	14.84
20	ATOM	1688	C	GLY	1102	5.626	25.311	27.790	1.00	12.52
	ATOM	1689	O	GLY	1102	5.396	24.451	28.619	1.00	15.72
	ATOM	1690	N	ALA	1103	5.166	25.148	26.598	1.00	14.40
	ATOM	1691	CA	ALA	1103	4.457	23.902	26.277	1.00	15.17
	ATOM	1692	CB	ALA	1103	3.600	24.015	24.985	1.00	16.74
25	ATOM	1693	C	ALA	1103	5.399	22.731	26.071	1.00	12.39
	ATOM	1694	O	ALA	1103	6.584	22.884	25.896	1.00	12.20
	ATOM	1695	N	SER	1104	4.923	21.519	26.193	1.00	13.14
	ATOM	1696	CA	SER	1104	5.749	20.332	25.943	1.00	14.28
	ATOM	1697	CB	SER	1104	5.055	19.140	26.646	1.00	15.28
30	ATOM	1698	OG	SER	1104	5.976	18.069	26.897	1.00	20.88
	ATOM	1699	C	SER	1104	5.852	20.118	24.396	1.00	17.06
	ATOM	1700	O	SER	1104	4.875	20.261	23.611	1.00	13.19
	ATOM	1701	N	PRO	1105	7.057	19.854	23.864	1.00	16.34
	ATOM	1702	CD	PRO	1105	8.387	20.171	24.385	1.00	15.63
35	ATOM	1703	CA	PRO	1105	7.137	19.468	22.465	1.00	17.11
	ATOM	1704	CB	PRO	1105	8.604	19.072	22.326	1.00	13.02
	ATOM	1705	CG	PRO	1105	9.209	20.205	23.126	1.00	10.15
	ATOM	1706	C	PRO	1105	6.121	18.398	22.053	1.00	19.27
	ATOM	1707	O	PRO	1105	5.475	17.766	22.869	1.00	23.30
40	ATOM	1708	N	TYR	1106	5.986	18.187	20.742	1.00	22.83
	ATOM	1709	CA	TYR	1106	5.142	17.203	19.986	1.00	19.50
	ATOM	1710	CB	TYR	1106	5.963	15.959	19.732	1.00	12.64
	ATOM	1711	CG	TYR	1106	7.278	16.227	19.109	1.00	11.95
	ATOM	1712	CD1	TYR	1106	8.460	16.208	19.872	1.00	13.48
45	ATOM	1713	CE1	TYR	1106	9.680	16.537	19.253	1.00	16.37
	ATOM	1714	CD2	TYR	1106	7.318	16.550	17.749	1.00	11.65
	ATOM	1715	CE2	TYR	1106	8.516	16.867	17.127	1.00	14.83
	ATOM	1716	CZ	TYR	1106	9.727	16.880	17.871	1.00	19.04
	ATOM	1717	OH	TYR	1106	10.908	17.348	17.228	1.00	17.89
50	ATOM	1718	C	TYR	1106	3.808	16.843	20.585	1.00	21.40
	ATOM	1719	O	TYR	1106	3.495	15.700	20.868	1.00	23.90
	ATOM	1720	N	PRO	1107	2.964	17.863	20.721	1.00	22.07
	ATOM	1721	CD	PRO	1107	3.242	19.275	20.285	1.00	24.51
	ATOM	1722	CA	PRO	1107	1.603	17.694	21.248	1.00	24.21
55	ATOM	1723	CB	PRO	1107	0.984	19.108	21.059	1.00	24.40
	ATOM	1724	CG	PRO	1107	1.855	19.903	20.054	1.00	22.46
	ATOM	1725	C	PRO	1107	0.812	16.573	20.588	1.00	26.77
	ATOM	1726	O	PRO	1107	0.706	16.481	19.357	1.00	26.38
	ATOM	1727	N	GLY	1108	0.140	15.749	21.361	1.00	31.02
60	ATOM	1728	CA	GLY	1108	-0.633	14.613	20.766	1.00	38.57
	ATOM	1729	C	GLY	1108	0.235	13.348	20.559	1.00	42.74
	ATOM	1730	O	GLY	1108	0.002	12.319	21.204	1.00	47.64

	ATOM	1731	N	VAL	1109	1.253	13.450	19.687	1.00	41.15
	ATOM	1732	CA	VAL	1109	2.242	12.400	19.349	1.00	39.04
	ATOM	1733	CB	VAL	1109	3.423	13.072	18.576	1.00	40.45
	ATOM	1734	CG1	VAL	1109	4.593	12.079	18.411	1.00	42.61
5	ATOM	1735	CG2	VAL	1109	2.957	13.568	17.195	1.00	42.46
	ATOM	1736	C	VAL	1109	2.818	11.630	20.552	1.00	37.34
	ATOM	1737	O	VAL	1109	3.228	12.188	21.562	1.00	38.28
	ATOM	1738	N	LYS	1110	2.785	10.296	20.456	1.00	36.51
	ATOM	1739	CA	LYS	1110	3.321	9.368	21.464	1.00	33.65
10	ATOM	1740	CB	LYS	1110	2.593	8.000	21.469	1.00	35.67
	ATOM	1741	C	LYS	1110	4.743	9.135	21.020	1.00	32.90
	ATOM	1742	O	LYS	1110	5.045	8.941	19.837	1.00	28.20
	ATOM	1743	N	ILE	1111	5.654	9.163	21.963	1.00	34.79
	ATOM	1744	CA	ILE	1111	7.072	9.002	21.627	1.00	34.96
15	ATOM	1745	CB	ILE	1111	7.894	9.828	22.686	1.00	29.93
	ATOM	1746	CG2	ILE	1111	9.374	9.943	22.282	1.00	27.52
	ATOM	1747	CG1	ILE	1111	7.280	11.235	22.791	1.00	24.64
	ATOM	1748	CD1	ILE	1111	7.249	12.051	21.493	1.00	22.47
	ATOM	1749	C	ILE	1111	7.356	7.511	21.579	1.00	38.19
20	ATOM	1750	O	ILE	1111	7.722	6.844	22.544	1.00	39.52
	ATOM	1751	N	ASP	1112	6.979	7.005	20.398	1.00	42.08
	ATOM	1752	CA	ASP	1112	7.060	5.581	19.946	1.00	44.34
	ATOM	1753	CB	ASP	1112	5.561	5.060	19.620	1.00	45.09
	ATOM	1754	CG	ASP	1112	4.738	5.594	18.411	1.00	45.93
25	ATOM	1755	OD1	ASP	1112	3.574	5.240	18.295	1.00	46.58
	ATOM	1756	OD2	ASP	1112	5.215	6.342	17.577	1.00	47.21
	ATOM	1757	C	ASP	1112	7.994	5.318	18.752	1.00	45.81
	ATOM	1758	O	ASP	1112	8.817	6.170	18.385	1.00	44.87
	ATOM	1759	N	GLU	1113	7.929	4.102	18.157	1.00	49.66
30	ATOM	1760	CA	GLU	1113	8.742	3.729	16.942	1.00	51.81
	ATOM	1761	CB	GLU	1113	8.531	2.217	16.554	1.00	54.69
	ATOM	1762	C	GLU	1113	8.321	4.610	15.723	1.00	51.21
	ATOM	1763	O	GLU	1113	9.107	5.002	14.851	1.00	48.46
	ATOM	1764	N	GLU	1114	7.022	4.979	15.685	1.00	50.44
35	ATOM	1765	CA	GLU	1114	6.555	5.845	14.600	1.00	49.42
	ATOM	1766	CB	GLU	1114	4.983	5.796	14.502	1.00	54.53
	ATOM	1767	CG	GLU	1114	4.382	4.376	14.366	1.00	62.16
	ATOM	1768	CD	GLU	1114	5.036	3.349	13.387	1.00	68.41
	ATOM	1769	OE1	GLU	1114	6.196	3.407	12.951	1.00	69.59
40	ATOM	1770	OE2	GLU	1114	4.347	2.375	13.096	1.00	72.80
	ATOM	1771	C	GLU	1114	7.083	7.254	14.781	1.00	45.44
	ATOM	1772	O	GLU	1114	7.685	7.786	13.875	1.00	43.12
	ATOM	1773	N	PHE	1115	7.033	7.857	15.948	1.00	42.27
	ATOM	1774	CA	PHE	1115	7.557	9.230	16.128	1.00	40.17
45	ATOM	1775	CB	PHE	1115	7.552	9.544	17.657	1.00	37.46
	ATOM	1776	CG	PHE	1115	8.535	10.577	18.048	1.00	34.89
	ATOM	1777	CD1	PHE	1115	9.855	10.208	18.342	1.00	32.95
	ATOM	1778	CD2	PHE	1115	8.168	11.926	18.076	1.00	34.45
	ATOM	1779	CE1	PHE	1115	10.824	11.162	18.650	1.00	35.34
50	ATOM	1780	CE2	PHE	1115	9.142	12.883	18.391	1.00	34.78
	ATOM	1781	CZ	PHE	1115	10.461	12.512	18.673	1.00	31.65
	ATOM	1782	C	PHE	1115	8.937	9.278	15.538	1.00	38.95
	ATOM	1783	O	PHE	1115	9.281	10.110	14.707	1.00	40.23
	ATOM	1784	N	CYS	1116	9.748	8.322	15.960	1.00	40.57
55	ATOM	1785	CA	CYS	1116	11.122	8.213	15.463	1.00	40.53
	ATOM	1786	CB	CYS	1116	11.865	7.124	16.246	1.00	40.94
	ATOM	1787	SG	CYS	1116	12.179	7.314	18.030	1.00	42.44
	ATOM	1788	C	CYS	1116	11.095	7.882	13.960	1.00	42.50
	ATOM	1789	O	CYS	1116	11.926	8.409	13.227	1.00	42.47
60	ATOM	1790	N	ARG	1117	10.206	7.009	13.441	1.00	43.56
	ATOM	1791	CA	ARG	1117	10.125	6.721	11.966	1.00	46.24
	ATOM	1792	CB	ARG	1117	8.991	5.697	11.683	1.00	48.27

	ATOM	1793	CG	ARG	1117	8.629	5.179	10.263	1.00	49.86
	ATOM	1794	CD	ARG	1117	7.140	4.727	10.237	1.00	47.87
	ATOM	1795	NE	ARG	1117	6.293	5.810	9.688	1.00	50.64
	ATOM	1796	CZ	ARG	1117	4.994	6.039	9.990	1.00	52.53
5	ATOM	1797	NH1	ARG	1117	4.388	7.053	9.383	1.00	55.06
	ATOM	1798	NH2	ARG	1117	4.261	5.357	10.874	1.00	50.82
	ATOM	1799	C	ARG	1117	9.809	8.051	11.251	1.00	46.33
	ATOM	1800	O	ARG	1117	10.540	8.540	10.392	1.00	50.20
	ATOM	1801	N	ARG	1118	8.722	8.721	11.586	1.00	45.44
10	ATOM	1802	CA	ARG	1118	8.392	10.025	10.990	1.00	43.71
	ATOM	1803	CB	ARG	1118	7.121	10.542	11.664	1.00	47.21
	ATOM	1804	CG	ARG	1118	5.903	9.620	11.471	1.00	50.07
	ATOM	1805	CD	ARG	1118	5.270	9.192	12.819	1.00	54.40
	ATOM	1806	NE	ARG	1118	4.341	10.205	13.352	1.00	59.63
15	ATOM	1807	CZ	ARG	1118	3.629	10.091	14.510	1.00	61.49
	ATOM	1808	NH1	ARG	1118	2.817	11.115	14.815	1.00	63.73
	ATOM	1809	NH2	ARG	1118	3.709	9.067	15.387	1.00	59.39
	ATOM	1810	C	ARG	1118	9.517	11.093	11.075	1.00	42.51
	ATOM	1811	O	ARG	1118	9.574	11.938	10.197	1.00	43.92
20	ATOM	1812	N	LEU	1119	10.409	11.232	12.065	1.00	40.29
	ATOM	1813	CA	LEU	1119	11.454	12.298	11.945	1.00	39.16
	ATOM	1814	CB	LEU	1119	12.254	12.491	13.208	1.00	38.62
	ATOM	1815	CG	LEU	1119	11.584	12.776	14.538	1.00	37.73
	ATOM	1816	CD1	LEU	1119	12.813	12.596	15.471	1.00	40.39
25	ATOM	1817	CD2	LEU	1119	10.804	14.131	14.675	1.00	35.94
	ATOM	1818	C	LEU	1119	12.528	12.087	10.848	1.00	41.21
	ATOM	1819	O	LEU	1119	13.243	13.022	10.441	1.00	39.66
	ATOM	1820	N	LYS	1120	12.790	10.841	10.399	1.00	43.68
	ATOM	1821	CA	LYS	1120	13.802	10.652	9.314	1.00	45.61
30	ATOM	1822	CB	LYS	1120	14.172	9.161	9.104	1.00	48.57
	ATOM	1823	CG	LYS	1120	14.831	8.479	10.332	1.00	52.47
	ATOM	1824	CD	LYS	1120	16.081	7.537	10.152	1.00	54.03
	ATOM	1825	CE	LYS	1120	17.375	8.346	9.854	1.00	56.83
	ATOM	1826	NZ	LYS	1120	18.541	7.890	10.645	1.00	56.71
35	ATOM	1827	C	LYS	1120	13.190	11.200	8.021	1.00	46.83
	ATOM	1828	O	LYS	1120	13.882	11.754	7.158	1.00	46.28
	ATOM	1829	N	GLU	1121	11.845	11.010	7.943	1.00	47.44
	ATOM	1830	CA	GLU	1121	10.969	11.484	6.845	1.00	48.97
	ATOM	1831	CB	GLU	1121	9.437	11.409	7.112	1.00	51.08
40	ATOM	1832	CG	GLU	1121	8.429	10.296	6.808	1.00	53.50
	ATOM	1833	CD	GLU	1121	8.746	9.028	7.557	1.00	54.89
	ATOM	1834	OE1	GLU	1121	7.785	8.384	7.985	1.00	58.40
	ATOM	1835	OE2	GLU	1121	9.924	8.671	7.672	1.00	54.55
	ATOM	1836	C	GLU	1121	11.127	12.975	6.621	1.00	49.03
45	ATOM	1837	O	GLU	1121	11.263	13.491	5.509	1.00	52.96
	ATOM	1838	N	GLY	1122	10.963	13.674	7.742	1.00	46.68
	ATOM	1839	CA	GLY	1122	10.979	15.139	7.843	1.00	43.47
	ATOM	1840	C	GLY	1122	9.681	15.592	8.549	1.00	41.28
	ATOM	1841	O	GLY	1122	9.111	16.624	8.220	1.00	41.39
50	ATOM	1842	N	THR	1123	9.119	14.810	9.483	1.00	39.99
	ATOM	1843	CA	THR	1123	7.910	15.242	10.226	1.00	38.69
	ATOM	1844	CB	THR	1123	7.230	14.057	11.003	1.00	38.73
	ATOM	1845	OG1	THR	1123	6.338	13.450	10.097	1.00	42.71
	ATOM	1846	CG2	THR	1123	6.338	14.413	12.197	1.00	40.39
55	ATOM	1847	C	THR	1123	8.353	16.289	11.232	1.00	37.06
	ATOM	1848	O	THR	1123	9.180	16.007	12.086	1.00	37.08
	ATOM	1849	N	ARG	1124	8.013	17.546	11.023	1.00	34.87
	ATOM	1850	CA	ARG	1124	8.332	18.615	11.991	1.00	32.41
	ATOM	1851	CB	ARG	1124	8.863	19.944	11.288	1.00	29.99
60	ATOM	1852	CG	ARG	1124	10.260	19.884	10.593	1.00	26.99
	ATOM	1853	CD	ARG	1124	11.085	18.819	11.342	1.00	29.64
	ATOM	1854	NE	ARG	1124	12.353	18.342	10.758	1.00	29.16

	ATOM	1855	CZ	ARG	1124	12.584	17.022	10.579	1.00	28.45
	ATOM	1856	NH1	ARG	1124	11.682	16.113	10.900	1.00	29.53
	ATOM	1857	NH2	ARG	1124	13.743	16.579	10.115	1.00	27.84
	ATOM	1858	C	ARG	1124	7.111	19.006	12.851	1.00	33.35
5	ATOM	1859	O	ARG	1124	5.948	18.609	12.626	1.00	34.01
	ATOM	1860	N	MET	1125	7.400	19.761	13.911	1.00	31.12
	ATOM	1861	CA	MET	1125	6.388	20.289	14.799	1.00	27.94
	ATOM	1862	CB	MET	1125	7.067	20.846	16.095	1.00	24.62
	ATOM	1863	CG	MET	1125	6.752	19.927	17.255	1.00	14.78
10	ATOM	1864	SD	MET	1125	7.309	20.490	18.818	1.00	10.40
	ATOM	1865	CE	MET	1125	9.082	20.497	18.646	1.00	2.00
	ATOM	1866	C	MET	1125	5.639	21.413	14.077	1.00	29.63
	ATOM	1867	O	MET	1125	6.179	22.087	13.190	1.00	29.58
	ATOM	1868	N	ARG	1126	4.354	21.549	14.379	1.00	32.36
15	ATOM	1869	CA	ARG	1126	3.485	22.619	13.827	1.00	35.30
	ATOM	1870	CB	ARG	1126	2.046	22.347	14.318	1.00	41.81
	ATOM	1871	CG	ARG	1126	1.998	22.048	15.900	1.00	48.40
	ATOM	1872	CD	ARG	1126	1.564	23.240	16.800	1.00	49.82
	ATOM	1873	NE	ARG	1126	1.605	22.899	18.230	1.00	52.07
20	ATOM	1874	CZ	ARG	1126	1.268	23.819	19.166	1.00	55.60
	ATOM	1875	NH1	ARG	1126	1.298	23.537	20.491	1.00	56.12
	ATOM	1876	NH2	ARG	1126	0.897	25.051	18.803	1.00	56.08
	ATOM	1877	C	ARG	1126	4.011	23.950	14.372	1.00	33.43
	ATOM	1878	O	ARG	1126	4.807	23.907	15.310	1.00	35.75
25	ATOM	1879	N	ALA	1127	3.647	25.144	13.914	1.00	30.99
	ATOM	1880	CA	ALA	1127	4.219	26.377	14.527	1.00	27.32
	ATOM	1881	CB	ALA	1127	3.951	27.619	13.636	1.00	26.53
	ATOM	1882	C	ALA	1127	3.628	26.646	15.930	1.00	26.08
	ATOM	1883	O	ALA	1127	2.459	26.318	16.205	1.00	28.40
30	ATOM	1884	N	PRO	1128	4.415	27.135	16.907	1.00	20.84
	ATOM	1885	CD	PRO	1128	5.860	27.223	16.901	1.00	18.41
	ATOM	1886	CA	PRO	1128	3.810	27.388	18.206	1.00	17.74
	ATOM	1887	CB	PRO	1128	4.997	27.513	19.107	1.00	18.57
	ATOM	1888	CG	PRO	1128	6.120	27.943	18.190	1.00	19.66
35	ATOM	1889	C	PRO	1128	2.949	28.614	18.104	1.00	18.60
	ATOM	1890	O	PRO	1128	3.110	29.422	17.208	1.00	16.70
	ATOM	1891	N	ASP	1129	2.081	28.840	19.057	1.00	19.15
	ATOM	1892	CA	ASP	1129	1.151	29.999	19.100	1.00	18.53
	ATOM	1893	CB	ASP	1129	0.120	30.025	20.289	1.00	18.06
40	ATOM	1894	CG	ASP	1129	-0.877	28.886	20.309	1.00	21.66
	ATOM	1895	OD1	ASP	1129	-1.631	28.755	21.293	1.00	22.21
	ATOM	1896	OD2	ASP	1129	-0.880	28.123	19.346	1.00	24.19
	ATOM	1897	C	ASP	1129	1.694	31.375	19.226	1.00	19.44
	ATOM	1898	O	ASP	1129	0.891	32.287	19.045	1.00	24.77
45	ATOM	1899	N	TYR	1130	2.939	31.600	19.653	1.00	18.48
	ATOM	1900	CA	TYR	1130	3.418	32.996	19.857	1.00	15.24
	ATOM	1901	CB	TYR	1130	3.990	33.140	21.314	1.00	12.08
	ATOM	1902	CG	TYR	1130	2.952	32.666	22.221	1.00	11.37
	ATOM	1903	CD1	TYR	1130	2.957	31.365	22.729	1.00	11.13
50	ATOM	1904	CE1	TYR	1130	1.920	30.946	23.566	1.00	9.76
	ATOM	1905	CD2	TYR	1130	1.926	33.551	22.535	1.00	8.41
	ATOM	1906	CE2	TYR	1130	0.911	33.121	23.369	1.00	10.40
	ATOM	1907	CZ	TYR	1130	0.920	31.834	23.876	1.00	7.94
	ATOM	1908	OH	TYR	1130	-0.083	31.477	24.744	1.00	16.20
55	ATOM	1909	C	TYR	1130	4.425	33.478	18.896	1.00	15.77
	ATOM	1910	O	TYR	1130	4.800	34.648	18.850	1.00	18.09
	ATOM	1911	N	THR	1131	4.887	32.500	18.179	1.00	16.94
	ATOM	1912	CA	THR	1131	5.941	32.648	17.202	1.00	18.99
	ATOM	1913	CB	THR	1131	6.253	31.291	16.603	1.00	16.51
60	ATOM	1914	OG1	THR	1131	7.560	31.420	16.151	1.00	16.94
	ATOM	1915	CG2	THR	1131	5.409	30.863	15.361	1.00	19.81
	ATOM	1916	C	THR	1131	5.781	33.573	16.061	1.00	20.79

	ATOM	1917	O	THR	1131	4.669	33.993	15.726	1.00	24.01
	ATOM	1918	N	THR	1132	6.914	33.872	15.442	1.00	21.24
	ATOM	1919	CA	THR	1132	6.896	34.695	14.251	1.00	25.34
	ATOM	1920	CB	THR	1132	7.980	35.734	14.326	1.00	26.52
5	ATOM	1921	OG1	THR	1132	9.238	35.089	14.400	1.00	26.14
	ATOM	1922	CG2	THR	1132	7.709	36.687	15.486	1.00	28.70
	ATOM	1923	C	THR	1132	7.097	33.826	12.993	1.00	29.71
	ATOM	1924	O	THR	1132	7.497	32.651	13.033	1.00	32.05
	ATOM	1925	N	PRO	1133	6.801	34.330	11.784	1.00	33.58
10	ATOM	1926	CD	PRO	1133	6.261	35.675	11.398	1.00	31.50
	ATOM	1927	CA	PRO	1133	7.047	33.475	10.603	1.00	31.44
	ATOM	1928	CB	PRO	1133	6.611	34.397	9.431	1.00	32.59
	ATOM	1929	CG	PRO	1133	5.640	35.409	10.046	1.00	30.34
	ATOM	1930	C	PRO	1133	8.523	33.061	10.572	1.00	30.59
15	ATOM	1931	O	PRO	1133	8.897	31.910	10.544	1.00	30.02
	ATOM	1932	N	GLU	1134	9.417	34.037	10.621	1.00	30.18
	ATOM	1933	CA	GLU	1134	10.850	33.752	10.545	1.00	31.71
	ATOM	1934	CB	GLU	1134	11.578	35.125	10.322	1.00	30.12
	ATOM	1935	CG	GLU	1134	11.280	36.416	11.087	1.00	30.33
20	ATOM	1936	CD	GLU	1134	10.099	37.199	10.559	1.00	29.05
	ATOM	1937	OE1	GLU	1134	9.010	37.030	11.083	1.00	30.75
	ATOM	1938	OE2	GLU	1134	10.251	37.988	9.631	1.00	30.95
	ATOM	1939	C	GLU	1134	11.430	32.940	11.725	1.00	35.77
	ATOM	1940	O	GLU	1134	12.386	32.133	11.577	1.00	38.27
25	ATOM	1941	N	MET	1135	10.862	33.165	12.943	1.00	34.45
	ATOM	1942	CA	MET	1135	11.312	32.380	14.100	1.00	31.53
	ATOM	1943	CB	MET	1135	10.595	32.816	15.384	1.00	29.77
	ATOM	1944	CG	MET	1135	11.405	32.529	16.631	1.00	25.99
	ATOM	1945	SD	MET	1135	12.845	33.570	16.615	1.00	20.76
30	ATOM	1946	CE	MET	1135	14.038	32.260	16.714	1.00	16.34
	ATOM	1947	C	MET	1135	10.946	30.922	13.774	1.00	30.41
	ATOM	1948	O	MET	1135	11.790	30.035	13.873	1.00	33.85
	ATOM	1949	N	TYR	1136	9.725	30.613	13.337	1.00	27.63
	ATOM	1950	CA	TYR	1136	9.406	29.211	12.994	1.00	27.32
35	ATOM	1951	CB	TYR	1136	7.897	29.098	12.665	1.00	29.58
	ATOM	1952	CG	TYR	1136	7.520	27.693	12.389	1.00	30.11
	ATOM	1953	CD1	TYR	1136	7.797	26.583	13.227	1.00	26.27
	ATOM	1954	CE1	TYR	1136	7.369	25.297	12.825	1.00	25.39
	ATOM	1955	CD2	TYR	1136	6.827	27.497	11.190	1.00	31.39
40	ATOM	1956	CE2	TYR	1136	6.411	26.217	10.807	1.00	26.57
	ATOM	1957	CZ	TYR	1136	6.682	25.140	11.609	1.00	24.14
	ATOM	1958	OH	TYR	1136	6.293	23.942	11.096	1.00	24.08
	ATOM	1959	C	TYR	1136	10.271	28.653	11.843	1.00	26.50
	ATOM	1960	O	TYR	1136	10.583	27.445	11.796	1.00	28.76
45	ATOM	1961	N	GLN	1137	10.662	29.501	10.889	1.00	24.07
	ATOM	1962	CA	GLN	1137	11.528	29.025	9.824	1.00	21.80
	ATOM	1963	CB	GLN	1137	11.717	30.110	8.725	1.00	28.73
	ATOM	1964	CG	GLN	1137	12.676	29.642	7.559	1.00	29.75
	ATOM	1965	CD	GLN	1137	12.168	28.310	7.061	1.00	31.06
50	ATOM	1966	OE1	GLN	1137	10.979	28.188	6.777	1.00	34.41
	ATOM	1967	NE2	GLN	1137	12.968	27.236	6.976	1.00	28.18
	ATOM	1968	C	GLN	1137	12.852	28.661	10.442	1.00	20.21
	ATOM	1969	O	GLN	1137	13.540	27.736	10.010	1.00	16.42
	ATOM	1970	N	THR	1138	13.300	29.415	11.452	1.00	19.75
55	ATOM	1971	CA	THR	1138	14.572	29.043	12.134	1.00	18.98
	ATOM	1972	CB	THR	1138	14.950	30.125	13.160	1.00	16.69
	ATOM	1973	OG1	THR	1138	15.003	31.352	12.492	1.00	15.14
	ATOM	1974	CG2	THR	1138	16.352	29.949	13.742	1.00	17.82
	ATOM	1975	C	THR	1138	14.412	27.654	12.843	1.00	20.29
60	ATOM	1976	O	THR	1138	15.276	26.785	12.718	1.00	19.06
	ATOM	1977	N	MET	1139	13.312	27.364	13.559	1.00	19.20
	ATOM	1978	CA	MET	1139	13.140	26.073	14.213	1.00	19.36

	ATOM	1979	CB	MET	1139	11.728	26.079	14.805	1.00	14.66
	ATOM	1980	CG	MET	1139	11.650	27.007	15.980	1.00	10.11
	ATOM	1981	SD	MET	1139	9.902	27.182	16.388	1.00	9.11
	ATOM	1982	CE	MET	1139	9.681	28.895	16.877	1.00	10.25
5	ATOM	1983	C	MET	1139	13.353	24.999	13.120	1.00	23.19
	ATOM	1984	O	MET	1139	14.265	24.147	13.215	1.00	24.78
	ATOM	1985	N	LEU	1140	12.590	25.119	11.991	1.00	25.23
	ATOM	1986	CA	LEU	1140	12.680	24.213	10.775	1.00	23.17
	ATOM	1987	CB	LEU	1140	11.919	24.787	9.621	1.00	20.44
10	ATOM	1988	CG	LEU	1140	10.426	24.839	9.857	1.00	20.18
	ATOM	1989	CD1	LEU	1140	9.800	25.529	8.605	1.00	20.32
	ATOM	1990	CD2	LEU	1140	9.847	23.440	10.032	1.00	19.94
	ATOM	1991	C	LEU	1140	14.089	23.974	10.261	1.00	22.12
	ATOM	1992	O	LEU	1140	14.513	22.880	9.888	1.00	23.91
15	ATOM	1993	N	ASP	1141	14.873	25.035	10.155	1.00	21.46
	ATOM	1994	CA	ASP	1141	16.269	24.896	9.707	1.00	21.14
	ATOM	1995	CB	ASP	1141	17.149	26.146	9.725	1.00	19.85
	ATOM	1996	CG	ASP	1141	16.766	27.391	9.012	1.00	21.57
	ATOM	1997	OD1	ASP	1141	15.638	27.581	8.613	1.00	24.58
20	ATOM	1998	OD2	ASP	1141	17.641	28.231	8.906	1.00	24.23
	ATOM	1999	C	ASP	1141	17.085	24.043	10.667	1.00	23.75
	ATOM	2000	O	ASP	1141	18.013	23.356	10.233	1.00	25.64
	ATOM	2001	N	CYS	1142	16.867	24.299	12.001	1.00	23.77
	ATOM	2002	CA	CYS	1142	17.580	23.686	13.182	1.00	21.74
25	ATOM	2003	CB	CYS	1142	17.096	24.320	14.535	1.00	20.04
	ATOM	2004	SG	CYS	1142	17.680	26.043	14.896	1.00	17.71
	ATOM	2005	C	CYS	1142	17.405	22.234	13.229	1.00	22.12
	ATOM	2006	O	CYS	1142	18.239	21.416	13.592	1.00	22.29
	ATOM	2007	N	TRP	1143	16.211	21.985	12.833	1.00	22.98
30	ATOM	2008	CA	TRP	1143	15.698	20.654	12.659	1.00	26.78
	ATOM	2009	CB	TRP	1143	14.180	20.766	12.883	1.00	26.48
	ATOM	2010	CG	TRP	1143	13.756	21.260	14.208	1.00	22.40
	ATOM	2011	CD2	TRP	1143	12.462	21.752	14.490	1.00	22.01
	ATOM	2012	CE2	TRP	1143	12.371	21.846	15.903	1.00	21.77
35	ATOM	2013	CE3	TRP	1143	11.377	22.124	13.678	1.00	18.40
	ATOM	2014	CD1	TRP	1143	14.401	21.078	15.433	1.00	21.05
	ATOM	2015	NE1	TRP	1143	13.561	21.428	16.447	1.00	25.36
	ATOM	2016	CZ2	TRP	1143	11.193	22.313	16.467	1.00	15.80
	ATOM	2017	CZ3	TRP	1143	10.196	22.593	14.248	1.00	17.09
40	ATOM	2018	CH2	TRP	1143	10.110	22.685	15.631	1.00	18.53
	ATOM	2019	C	TRP	1143	16.043	20.051	11.247	1.00	28.20
	ATOM	2020	O	TRP	1143	15.517	19.024	10.838	1.00	32.11
	ATOM	2021	N	HIS	1144	16.860	20.647	10.417	1.00	28.22
	ATOM	2022	CA	HIS	1144	17.203	20.116	9.096	1.00	30.82
45	ATOM	2023	CB	HIS	1144	18.347	21.003	8.495	1.00	32.30
	ATOM	2024	CG	HIS	1144	18.727	20.542	7.186	1.00	33.69
	ATOM	2025	CD2	HIS	1144	19.625	19.538	6.889	1.00	35.14
	ATOM	2026	ND1	HIS	1144	18.095	20.892	6.053	1.00	35.37
	ATOM	2027	CE1	HIS	1144	18.585	20.102	5.055	1.00	34.51
50	ATOM	2028	NE2	HIS	1144	19.522	19.267	5.564	1.00	35.38
	ATOM	2029	C	HIS	1144	17.663	18.662	9.132	1.00	34.49
	ATOM	2030	O	HIS	1144	18.711	18.404	9.693	1.00	38.32
	ATOM	2031	N	GLY	1145	17.042	17.683	8.442	1.00	37.28
	ATOM	2032	CA	GLY	1145	17.485	16.264	8.444	1.00	34.83
55	ATOM	2033	C	GLY	1145	19.008	16.085	8.490	1.00	37.11
	ATOM	2034	O	GLY	1145	19.517	15.304	9.291	1.00	38.67
	ATOM	2035	N	GLU	1146	19.791	16.769	7.634	1.00	36.69
	ATOM	2036	CA	GLU	1146	21.291	16.640	7.637	1.00	38.08
	ATOM	2037	CB	GLU	1146	21.915	16.850	6.196	1.00	40.29
60	ATOM	2038	CG	GLU	1146	21.765	15.651	5.269	1.00	49.47
	ATOM	2039	CD	GLU	1146	20.376	15.491	4.595	1.00	56.82
	ATOM	2040	OE1	GLU	1146	19.319	15.427	5.252	1.00	60.62

	ATOM	2041	OE2	GLU	1146	20.372	15.389	3.359	1.00	62.18
	ATOM	2042	C	GLU	1146	22.076	17.576	8.585	1.00	37.28
	ATOM	2043	O	GLU	1146	22.125	18.783	8.327	1.00	36.45
	ATOM	2044	N	PRO	1147	22.777	17.063	9.622	1.00	35.77
5	ATOM	2045	CD	PRO	1147	22.677	15.741	10.240	1.00	33.95
	ATOM	2046	CA	PRO	1147	23.542	17.872	10.551	1.00	36.83
	ATOM	2047	CB	PRO	1147	24.490	16.898	11.289	1.00	35.01
	ATOM	2048	CG	PRO	1147	24.103	15.552	10.757	1.00	31.35
	ATOM	2049	C	PRO	1147	24.277	19.031	9.944	1.00	38.83
10	ATOM	2050	O	PRO	1147	24.013	20.177	10.318	1.00	41.46
	ATOM	2051	N	SER	1148	25.147	18.815	8.974	1.00	40.29
	ATOM	2052	CA	SER	1148	25.841	19.994	8.446	1.00	40.87
	ATOM	2053	CB	SER	1148	27.003	19.604	7.563	1.00	45.40
	ATOM	2054	OG	SER	1148	28.175	20.127	8.216	1.00	52.17
15	ATOM	2055	C	SER	1148	25.003	21.011	7.697	1.00	39.76
	ATOM	2056	O	SER	1148	25.526	22.081	7.437	1.00	39.54
	ATOM	2057	N	GLN	1149	23.784	20.735	7.209	1.00	38.94
	ATOM	2058	CA	GLN	1149	23.014	21.849	6.603	1.00	38.99
	ATOM	2059	CB	GLN	1149	22.075	21.350	5.471	1.00	44.36
20	ATOM	2060	CG	GLN	1149	22.647	21.342	4.000	1.00	49.23
	ATOM	2061	CD	GLN	1149	22.080	20.064	3.318	1.00	54.91
	ATOM	2062	OE1	GLN	1149	22.609	18.951	3.403	1.00	56.67
	ATOM	2063	NE2	GLN	1149	20.915	20.085	2.704	1.00	55.36
	ATOM	2064	C	GLN	1149	22.171	22.600	7.692	1.00	36.18
25	ATOM	2065	O	GLN	1149	21.268	23.405	7.408	1.00	38.27
	ATOM	2066	N	ARG	1150	22.310	22.231	8.986	1.00	31.34
	ATOM	2067	CA	ARG	1150	21.628	22.948	10.097	1.00	22.73
	ATOM	2068	CB	ARG	1150	21.703	22.203	11.331	1.00	19.96
	ATOM	2069	CG	ARG	1150	20.616	21.235	11.301	1.00	17.26
30	ATOM	2070	CD	ARG	1150	20.801	20.399	12.535	1.00	16.38
	ATOM	2071	NE	ARG	1150	20.150	19.160	12.180	1.00	16.05
	ATOM	2072	CZ	ARG	1150	20.383	17.993	12.762	1.00	16.49
	ATOM	2073	NH1	ARG	1150	21.248	17.872	13.759	1.00	11.29
	ATOM	2074	NH2	ARG	1150	19.758	16.919	12.272	1.00	17.12
35	ATOM	2075	C	ARG	1150	22.456	24.184	10.318	1.00	20.39
	ATOM	2076	O	ARG	1150	23.681	24.118	10.091	1.00	24.40
	ATOM	2077	N	PRO	1151	21.933	25.330	10.750	1.00	16.34
	ATOM	2078	CD	PRO	1151	20.564	25.614	11.187	1.00	16.79
	ATOM	2079	CA	PRO	1151	22.826	26.481	10.963	1.00	14.97
40	ATOM	2080	CB	PRO	1151	21.852	27.632	11.173	1.00	11.25
	ATOM	2081	CG	PRO	1151	20.620	27.025	11.804	1.00	12.29
	ATOM	2082	C	PRO	1151	23.827	26.275	12.121	1.00	14.50
	ATOM	2083	O	PRO	1151	23.783	25.282	12.865	1.00	14.95
	ATOM	2084	N	THR	1152	24.834	27.118	12.225	1.00	11.46
45	ATOM	2085	CA	THR	1152	25.712	26.924	13.373	1.00	13.41
	ATOM	2086	CB	THR	1152	27.160	27.324	13.101	1.00	10.17
	ATOM	2087	OG1	THR	1152	27.066	28.629	12.651	1.00	17.68
	ATOM	2088	CG2	THR	1152	27.908	26.539	12.077	1.00	9.09
	ATOM	2089	C	THR	1152	25.233	27.825	14.528	1.00	15.56
50	ATOM	2090	O	THR	1152	24.272	28.614	14.401	1.00	20.97
	ATOM	2091	N	PHE	1153	25.814	27.751	15.726	1.00	14.35
	ATOM	2092	CA	PHE	1153	25.378	28.686	16.762	1.00	14.06
	ATOM	2093	CB	PHE	1153	25.931	28.239	18.191	1.00	18.95
	ATOM	2094	CG	PHE	1153	25.039	27.192	18.794	1.00	18.55
55	ATOM	2095	CD1	PHE	1153	23.744	27.535	19.253	1.00	14.58
	ATOM	2096	CD2	PHE	1153	25.465	25.842	18.869	1.00	15.25
	ATOM	2097	CE1	PHE	1153	22.875	26.554	19.779	1.00	11.41
	ATOM	2098	CE2	PHE	1153	24.609	24.846	19.377	1.00	12.08
	ATOM	2099	CZ	PHE	1153	23.323	25.210	19.827	1.00	16.51
60	ATOM	2100	C	PHE	1153	25.889	30.072	16.359	1.00	15.24
	ATOM	2101	O	PHE	1153	25.239	31.060	16.665	1.00	12.33
	ATOM	2102	N	SER	1154	27.055	30.269	15.701	1.00	18.36



	ATOM	2103	CA	SER	1154	27.479	31.667	15.305	1.00	21.07
	ATOM	2104	CB	SER	1154	28.947	31.643	14.859	1.00	20.62
	ATOM	2105	OG	SER	1154	29.772	31.146	15.936	1.00	17.53
	ATOM	2106	C	SER	1154	26.584	32.324	14.228	1.00	20.86
5	ATOM	2107	O	SER	1154	26.354	33.522	14.112	1.00	24.10
	ATOM	2108	N	GLU	1155	26.039	31.503	13.384	1.00	20.15
	ATOM	2109	CA	GLU	1155	25.067	31.953	12.378	1.00	18.73
	ATOM	2110	CB	GLU	1155	24.475	30.881	11.465	1.00	20.78
	ATOM	2111	CG	GLU	1155	24.936	30.667	10.019	1.00	21.99
10	ATOM	2112	CD	GLU	1155	26.096	29.731	9.914	1.00	24.10
	ATOM	2113	OE1	GLU	1155	27.202	30.271	10.032	1.00	26.13
	ATOM	2114	OE2	GLU	1155	25.876	28.514	9.727	1.00	19.08
	ATOM	2115	C	GLU	1155	23.883	32.284	13.195	1.00	15.11
	ATOM	2116	O	GLU	1155	23.354	33.361	13.116	1.00	16.58
15	ATOM	2117	N	LEU	1156	23.412	31.350	13.993	1.00	13.09
	ATOM	2118	CA	LEU	1156	22.214	31.641	14.803	1.00	15.40
	ATOM	2119	CB	LEU	1156	21.853	30.434	15.738	1.00	14.56
	ATOM	2120	CG	LEU	1156	21.182	29.203	15.074	1.00	12.64
	ATOM	2121	CD1	LEU	1156	21.345	28.025	16.028	1.00	9.29
20	ATOM	2122	CD2	LEU	1156	19.690	29.473	14.765	1.00	8.32
	ATOM	2123	C	LEU	1156	22.310	32.864	15.647	1.00	18.03
	ATOM	2124	O	LEU	1156	21.293	33.512	15.880	1.00	21.26
	ATOM	2125	N	VAL	1157	23.487	33.171	16.189	1.00	18.46
	ATOM	2126	CA	VAL	1157	23.685	34.352	17.018	1.00	16.85
25	ATOM	2127	CB	VAL	1157	25.075	34.385	17.520	1.00	16.06
	ATOM	2128	CG1	VAL	1157	25.401	35.743	18.144	1.00	20.87
	ATOM	2129	CG2	VAL	1157	25.195	33.374	18.650	1.00	14.98
	ATOM	2130	C	VAL	1157	23.449	35.576	16.203	1.00	21.66
	ATOM	2131	O	VAL	1157	22.811	36.525	16.678	1.00	24.36
30	ATOM	2132	N	GLU	1158	24.043	35.618	14.991	1.00	25.20
	ATOM	2133	CA	GLU	1158	23.877	36.748	13.978	1.00	24.35
	ATOM	2134	CB	GLU	1158	24.666	36.401	12.676	1.00	27.45
	ATOM	2135	CG	GLU	1158	25.739	37.333	12.078	1.00	33.37
	ATOM	2136	CD	GLU	1158	25.917	37.054	10.554	1.00	37.65
35	ATOM	2137	OE1	GLU	1158	26.149	35.917	10.107	1.00	37.59
	ATOM	2138	OE2	GLU	1158	25.838	38.031	9.805	1.00	41.18
	ATOM	2139	C	GLU	1158	22.389	36.935	13.598	1.00	21.38
	ATOM	2140	O	GLU	1158	21.715	37.947	13.777	1.00	20.86
	ATOM	2141	N	HIS	1159	21.767	35.826	13.222	1.00	19.39
40	ATOM	2142	CA	HIS	1159	20.359	35.803	12.806	1.00	19.70
	ATOM	2143	CB	HIS	1159	19.971	34.367	12.332	1.00	26.96
	ATOM	2144	CG	HIS	1159	18.590	34.300	11.804	1.00	30.60
	ATOM	2145	CD2	HIS	1159	18.101	34.913	10.655	1.00	29.08
	ATOM	2146	ND1	HIS	1159	17.536	33.663	12.423	1.00	36.03
45	ATOM	2147	CE1	HIS	1159	16.401	33.872	11.676	1.00	34.96
	ATOM	2148	NE2	HIS	1159	16.769	34.639	10.599	1.00	33.53
	ATOM	2149	C	HIS	1159	19.498	36.223	13.901	1.00	17.99
	ATOM	2150	O	HIS	1159	18.671	37.131	13.797	1.00	21.79
	ATOM	2151	N	LEU	1160	19.646	35.577	14.992	1.00	17.03
50	ATOM	2152	CA	LEU	1160	18.778	36.019	16.067	1.00	18.85
	ATOM	2153	CB	LEU	1160	19.053	35.100	17.283	1.00	19.27
	ATOM	2154	CG	LEU	1160	18.270	33.788	17.137	1.00	15.79
	ATOM	2155	CD1	LEU	1160	18.853	32.807	18.102	1.00	17.35
	ATOM	2156	CD2	LEU	1160	16.774	34.016	17.327	1.00	13.16
55	ATOM	2157	C	LEU	1160	18.965	37.493	16.368	1.00	16.37
	ATOM	2158	O	LEU	1160	17.989	38.169	16.668	1.00	19.14
	ATOM	2159	N	GLY	1161	20.158	38.024	16.181	1.00	15.23
	ATOM	2160	CA	GLY	1161	20.449	39.439	16.453	1.00	16.78
	ATOM	2161	C	GLY	1161	19.769	40.317	15.448	1.00	18.30
60	ATOM	2162	O	GLY	1161	19.345	41.441	15.732	1.00	16.10
	ATOM	2163	N	ASN	1162	19.741	39.827	14.218	1.00	20.13
	ATOM	2164	CA	ASN	1162	19.049	40.581	13.156	1.00	21.79

	ATOM	2165	CB	ASN	1162	19.076	39.869	11.799	1.00	18.49
	ATOM	2166	CG	ASN	1162	20.460	40.037	11.217	1.00	22.76
	ATOM	2167	OD1	ASN	1162	21.196	40.979	11.494	1.00	26.08
	ATOM	2168	ND2	ASN	1162	20.941	39.166	10.344	1.00	25.98
5	ATOM	2169	C	ASN	1162	17.600	40.694	13.578	1.00	25.01
	ATOM	2170	O	ASN	1162	17.039	41.784	13.675	1.00	27.11
	ATOM	2171	N	LEU	1163	17.000	39.541	13.908	1.00	26.81
	ATOM	2172	CA	LEU	1163	15.598	39.475	14.352	1.00	26.06
	ATOM	2173	CB	LEU	1163	15.252	38.068	14.779	1.00	26.82
10	ATOM	2174	CG	LEU	1163	14.497	37.181	13.769	1.00	29.87
	ATOM	2175	CD1	LEU	1163	15.220	37.208	12.437	1.00	27.89
	ATOM	2176	CD2	LEU	1163	14.381	35.737	14.282	1.00	25.85
	ATOM	2177	C	LEU	1163	15.396	40.364	15.545	1.00	27.45
	ATOM	2178	O	LEU	1163	14.393	41.057	15.680	1.00	28.61
15	ATOM	2179	N	LEU	1164	16.325	40.378	16.499	1.00	29.01
	ATOM	2180	CA	LEU	1164	16.137	41.225	17.698	1.00	30.58
	ATOM	2181	CB	LEU	1164	17.220	40.841	18.643	1.00	26.27
	ATOM	2182	CG	LEU	1164	16.980	41.333	20.085	1.00	28.78
	ATOM	2183	CD1	LEU	1164	15.524	41.221	20.659	1.00	29.20
20	ATOM	2184	CD2	LEU	1164	17.951	40.464	20.892	1.00	28.57
	ATOM	2185	C	LEU	1164	16.127	42.722	17.388	1.00	34.54
	ATOM	2186	O	LEU	1164	15.365	43.545	17.915	1.00	34.40
	ATOM	2187	N	GLN	1165	17.011	43.130	16.497	1.00	40.87
	ATOM	2188	CA	GLN	1165	16.989	44.534	16.126	1.00	45.70
25	ATOM	2189	CB	GLN	1165	18.272	44.869	15.347	1.00	48.67
	ATOM	2190	CG	GLN	1165	19.035	45.938	16.193	1.00	54.44
	ATOM	2191	CD	GLN	1165	18.634	47.452	16.021	1.00	56.74
	ATOM	2192	OE1	GLN	1165	19.339	48.238	15.327	1.00	58.30
	ATOM	2193	NE2	GLN	1165	17.573	47.912	16.709	1.00	56.65
30	ATOM	2194	C	GLN	1165	15.719	44.807	15.309	1.00	47.29
	ATOM	2195	O	GLN	1165	15.421	45.926	14.911	1.00	48.97
	ATOM	2196	N	ALA	1166	14.892	43.815	15.015	1.00	48.93
	ATOM	2197	CA	ALA	1166	13.662	44.137	14.282	1.00	50.37
	ATOM	2198	CB	ALA	1166	13.528	43.140	13.143	1.00	52.25
35	ATOM	2199	C	ALA	1166	12.442	44.130	15.218	1.00	52.50
	ATOM	2200	O	ALA	1166	11.476	43.374	15.175	1.00	52.45
	ATOM	2201	N	ASN	1167	12.568	45.034	16.155	1.00	53.58
	ATOM	2202	CA	ASN	1167	11.633	45.382	17.240	1.00	55.62
	ATOM	2203	CB	ASN	1167	11.646	44.512	18.537	1.00	57.30
40	ATOM	2204	CG	ASN	1167	11.596	43.000	18.459	1.00	55.48
	ATOM	2205	OD1	ASN	1167	10.653	42.386	18.961	1.00	51.86
	ATOM	2206	ND2	ASN	1167	12.629	42.362	17.943	1.00	54.74
	ATOM	2207	C	ASN	1167	12.304	46.684	17.691	1.00	57.91
	ATOM	2208	O	ASN	1167	13.175	46.667	18.573	1.00	60.31
45	ATOM	2209	N	ALA	1168	12.027	47.730	16.895	1.00	60.59
	ATOM	2210	CA	ALA	1168	12.471	49.169	16.950	1.00	61.01
	ATOM	2211	CB	ALA	1168	13.017	49.509	18.407	1.00	60.83
	ATOM	2212	C	ALA	1168	13.521	49.498	15.830	1.00	61.36
	ATOM	2213	O	ALA	1168	14.451	50.309	15.985	1.00	60.69
50	ATOM	2214	C1	INH	1	22.111	24.647	38.269	1.00	18.89
	ATOM	2215	C01	INH	1	19.219	26.322	40.216	1.00	14.62
	ATOM	2216	C02	INH	1	20.566	26.567	40.034	1.00	18.71
	ATOM	2217	C03	INH	1	18.387	27.383	40.549	1.00	8.83
	ATOM	2218	C04	INH	1	18.483	25.131	40.105	1.00	12.67
55	ATOM	2219	N05	INH	1	21.002	27.838	40.213	1.00	15.06
	ATOM	2220	S06	INH	1	21.746	25.183	39.807	1.00	18.54
	ATOM	2221	N07	INH	1	17.174	26.923	40.700	1.00	8.70
	ATOM	2222	N08	INH	1	18.822	28.585	40.747	1.00	9.78
	ATOM	2223	N09	INH	1	17.205	25.527	40.413	1.00	13.78
60	ATOM	2224	C10	INH	1	20.126	28.766	40.566	1.00	14.45
	ATOM	2225	C17	INH	1	25.260	23.030	39.747	1.00	9.14
	ATOM	2226	C18	INH	1	25.937	22.740	38.529	1.00	7.86

	ATOM	2227	C19	INH	1	25.239	23.038	37.318	1.00	10.46
	ATOM	2228	C20	INH	1	23.977	23.571	37.312	1.00	10.45
	ATOM	2229	C21	INH	1	23.344	23.875	38.470	1.00	12.31
	ATOM	2230	C22	INH	1	23.966	23.603	39.704	1.00	9.66
5	ATOM	2231	C27	INH	1	25.689	22.928	35.954	1.00	9.35
	ATOM	2232	O28	INH	1	25.156	23.553	35.039	1.00	12.19
	ATOM	2233	N29	INH	1	26.420	21.863	35.640	1.00	14.38
	ATOM	2234	C31	INH	1	27.579	22.240	32.219	1.00	25.16
	ATOM	2235	C32	INH	1	27.855	20.969	31.780	1.00	22.38
10	ATOM	2236	C33	INH	1	27.668	19.958	32.789	1.00	18.99
	ATOM	2237	C34	INH	1	27.207	20.260	34.102	1.00	13.62
	ATOM	2238	C35	INH	1	26.927	21.562	34.444	1.00	13.42
	ATOM	2239	C36	INH	1	27.126	22.522	33.494	1.00	19.32
	ATOM	2240	O39	INH	1	28.016	18.561	32.500	1.00	15.72
15	ATOM	2241	C40	INH	1	28.533	17.687	33.512	1.00	18.86
	ATOM	2242	O44	INH	1	28.010	20.890	30.293	1.00	19.40
	ATOM	2243	C45	INH	1	27.893	19.628	29.662	1.00	17.17
	ATOM	2244	O49	INH	1	27.883	23.434	31.440	1.00	32.15
	ATOM	2245	C50	INH	1	29.093	24.166	32.026	1.00	35.35
20	ATOM	2246	OH2	WAT	1	34.548	13.225	49.909	1.00	17.82
	ATOM	2247	OH2	WAT	2	37.315	12.852	45.457	1.00	49.58
	ATOM	2248	OH2	WAT	3	34.057	9.649	47.170	1.00	27.80
	ATOM	2249	OH2	WAT	4	36.618	32.171	43.575	1.00	34.60
	ATOM	2250	OH2	WAT	5	24.902	12.420	52.559	1.00	67.99
25	ATOM	2251	OH2	WAT	6	17.961	20.786	52.109	1.00	14.76
	ATOM	2252	OH2	WAT	7	36.970	31.379	59.957	1.00	91.33
	ATOM	2253	OH2	WAT	8	24.995	39.600	55.161	1.00	81.74
	ATOM	2254	OH2	WAT	9	38.269	40.102	50.357	1.00	75.66
	ATOM	2255	OH2	WAT	10	30.093	13.334	47.716	1.00	11.54
30	ATOM	2256	OH2	WAT	11	33.665	1.127	40.846	1.00	20.17
	ATOM	2257	OH2	WAT	12	27.986	1.215	41.907	1.00	33.44
	ATOM	2258	OH2	WAT	13	21.163	2.173	43.000	1.00	89.30
	ATOM	2259	OH2	WAT	14	41.561	27.639	37.269	1.00	35.73
	ATOM	2260	OH2	WAT	15	35.416	29.290	58.752	1.00	36.64
35	ATOM	2261	OH2	WAT	16	26.476	33.936	54.738	1.00	18.37
	ATOM	2262	OH2	WAT	17	14.139	12.458	47.487	1.00	40.73
	ATOM	2263	OH2	WAT	18	22.649	35.507	39.101	1.00	22.24
	ATOM	2264	OH2	WAT	19	23.475	37.872	35.424	1.00	41.98
	ATOM	2265	OH2	WAT	20	22.800	40.683	35.743	1.00	61.82
40	ATOM	2266	OH2	WAT	21	25.344	16.235	37.727	1.00	22.92
	ATOM	2267	OH2	WAT	22	26.923	14.538	35.426	1.00	13.72
	ATOM	2268	OH2	WAT	23	35.129	15.141	48.316	1.00	12.43
	ATOM	2269	OH2	WAT	24	9.675	31.738	38.547	1.00	38.07
	ATOM	2270	OH2	WAT	25	10.834	28.120	37.401	1.00	17.84
45	ATOM	2271	OH2	WAT	26	1.245	22.482	27.779	1.00	23.20
	ATOM	2272	OH2	WAT	27	1.041	27.306	23.572	1.00	12.48
	ATOM	2273	OH2	WAT	28	-0.208	23.913	25.123	1.00	48.47
	ATOM	2274	OH2	WAT	29	2.971	18.535	16.655	1.00	13.50
	ATOM	2275	OH2	WAT	30	9.948	19.475	14.797	1.00	17.51
50	ATOM	2276	OH2	WAT	31	12.909	16.411	18.059	1.00	19.02
	ATOM	2277	OH2	WAT	32	21.326	19.212	23.334	1.00	20.45
	ATOM	2278	OH2	WAT	33	23.051	17.305	21.845	1.00	12.88
	ATOM	2279	OH2	WAT	34	19.124	16.054	24.066	1.00	5.97
	ATOM	2280	OH2	WAT	35	14.459	41.552	37.771	1.00	35.34
55	ATOM	2281	OH2	WAT	36	9.755	21.262	31.584	1.00	43.82
	ATOM	2282	OH2	WAT	37	4.242	27.040	35.563	1.00	12.38
	ATOM	2283	OH2	WAT	38	-1.550	37.527	28.220	1.00	29.59
	ATOM	2284	OH2	WAT	39	8.387	42.795	21.015	1.00	35.54
	ATOM	2285	OH2	WAT	40	32.166	21.338	20.282	1.00	17.46
60	ATOM	2286	OH2	WAT	41	30.747	19.974	13.933	1.00	39.46
	ATOM	2287	OH2	WAT	42	28.825	22.320	10.764	1.00	32.63
	ATOM	2288	OH2	WAT	43	11.271	3.702	14.460	1.00	23.99

	ATOM	2289	OH2	WAT	44	12.866	20.860	8.939	1.00	29.40
	ATOM	2290	OH2	WAT	45	15.875	22.841	6.803	1.00	32.59
	ATOM	2291	OH2	WAT	46	7.195	30.535	8.890	1.00	23.27
	ATOM	2292	OH2	WAT	47	40.104	31.256	37.242	1.00	49.59
5	ATOM	2293	OH2	WAT	48	10.447	26.480	39.494	1.00	54.13
	ATOM	2294	OH2	WAT	49	19.617	12.685	51.158	1.00	23.88
	ATOM	2295	OH2	WAT	50	29.496	14.639	35.050	1.00	30.50
	ATOM	2296	OH2	WAT	51	29.485	10.804	33.888	1.00	27.93
	ATOM	2297	OH2	WAT	52	35.485	6.629	36.473	1.00	24.71
10	ATOM	2298	OH2	WAT	53	22.972	37.804	41.733	1.00	60.44
	ATOM	2299	OH2	WAT	54	27.912	15.258	47.568	1.00	16.89
	ATOM	2300	OH2	WAT	55	9.573	40.099	32.795	1.00	36.41
	ATOM	2301	OH2	WAT	56	31.829	29.420	18.915	1.00	27.06
	ATOM	2302	OH2	WAT	57	20.875	15.991	21.305	1.00	22.41
15	ATOM	2303	OH2	WAT	58	33.908	21.274	45.151	1.00	46.19
	ATOM	2304	OH2	WAT	59	27.786	39.554	54.673	1.00	34.72
	ATOM	2305	OH2	WAT	60	12.415	19.544	45.380	1.00	33.19
	ATOM	2306	OH2	WAT	61	12.897	26.434	47.503	1.00	43.43
	ATOM	2307	OH2	WAT	62	7.303	29.961	38.627	1.00	32.94
20	ATOM	2308	OH2	WAT	63	4.634	32.397	39.731	1.00	63.37
	ATOM	2309	OH2	WAT	64	30.766	41.023	43.053	1.00	38.25
	ATOM	2310	OH2	WAT	65	27.994	5.877	37.833	1.00	37.03
	ATOM	2311	OH2	WAT	66	19.894	11.274	40.490	1.00	28.73
	ATOM	2312	OH2	WAT	67	35.801	34.433	30.190	1.00	30.64
25	ATOM	2313	OH2	WAT	68	33.161	34.563	27.654	1.00	15.69
	ATOM	2314	OH2	WAT	69	32.519	33.673	23.243	1.00	34.65
	ATOM	2315	OH2	WAT	70	31.291	27.869	33.852	1.00	42.56
	ATOM	2316	OH2	WAT	71	37.384	32.602	40.463	1.00	50.04
	ATOM	2317	OH2	WAT	72	33.223	35.278	40.861	1.00	38.82
30	ATOM	2318	OH2	WAT	73	36.367	31.425	35.298	1.00	40.16
	ATOM	2319	OH2	WAT	74	37.149	32.714	32.019	1.00	34.69
	ATOM	2320	OH2	WAT	75	35.255	35.550	33.148	1.00	46.40
	ATOM	2321	OH2	WAT	76	36.715	31.014	28.864	1.00	23.59
	ATOM	2322	OH2	WAT	77	27.885	22.984	54.467	1.00	36.95
35	ATOM	2323	OH2	WAT	78	29.082	16.425	56.776	1.00	74.08
	ATOM	2324	OH2	WAT	79	33.729	22.016	58.060	1.00	23.98
	ATOM	2325	OH2	WAT	80	34.288	19.816	56.188	1.00	51.00
	ATOM	2326	OH2	WAT	81	13.950	29.489	44.073	1.00	34.10
	ATOM	2327	OH2	WAT	82	22.270	37.019	46.062	1.00	47.86
40	ATOM	2328	OH2	WAT	83	21.137	35.937	43.530	1.00	44.52
	ATOM	2329	OH2	WAT	84	22.700	38.577	50.997	1.00	50.63
	ATOM	2330	OH2	WAT	85	29.919	43.174	46.637	1.00	42.26
	ATOM	2331	OH2	WAT	86	30.803	7.962	36.842	1.00	43.83
	ATOM	2332	OH2	WAT	87	32.675	10.034	35.163	1.00	23.79
45	ATOM	2333	OH2	WAT	88	31.328	15.413	33.442	1.00	28.01
	ATOM	2334	OH2	WAT	89	36.351	18.583	26.226	1.00	38.07
	ATOM	2335	OH2	WAT	90	34.675	15.932	28.920	1.00	29.96
	ATOM	2336	OH2	WAT	91	28.339	37.115	34.563	1.00	52.20
	ATOM	2337	OH2	WAT	92	13.909	38.705	34.715	1.00	33.12
50	ATOM	2338	OH2	WAT	93	13.125	41.678	27.218	1.00	26.05
	ATOM	2339	OH2	WAT	94	17.016	42.631	25.980	1.00	25.19
	ATOM	2340	OH2	WAT	95	23.692	39.647	13.190	1.00	46.62
	ATOM	2341	OH2	WAT	96	22.410	35.350	9.379	1.00	15.22
	ATOM	2342	OH2	WAT	97	27.878	28.033	8.163	1.00	37.79
55	ATOM	2343	OH2	WAT	98	29.630	26.067	16.072	1.00	44.86
	ATOM	2344	OH2	WAT	99	33.466	27.410	17.797	1.00	34.77
	ATOM	2345	OH2	WAT	100	8.200	23.543	28.215	1.00	44.46
	ATOM	2346	OH2	WAT	101	1.950	20.748	23.869	1.00	27.19
	ATOM	2347	OH2	WAT	102	2.290	26.581	21.091	1.00	8.02
60	ATOM	2348	OH2	WAT	103	3.082	21.878	30.651	1.00	19.42
	ATOM	2349	OH2	WAT	104	5.051	25.075	39.296	1.00	50.74
	ATOM	2350	OH2	WAT	105	33.167	18.487	20.184	1.00	59.39

	ATOM	2351	OH2	WAT	106	9.441	12.543	26.459	1.00	29.76
	ATOM	2352	OH2	WAT	107	4.522	9.248	24.885	1.00	55.98
	ATOM	2353	OH2	WAT	108	1.759	4.482	16.285	1.00	63.56
	ATOM	2354	OH2	WAT	109	6.598	1.331	18.743	1.00	42.47
5	ATOM	2355	OH2	WAT	110	11.663	1.991	17.719	1.00	58.51
	ATOM	2356	OH2	WAT	111	14.362	3.963	16.972	1.00	45.93
	ATOM	2357	OH2	WAT	112	0.105	18.678	17.030	1.00	48.45
	ATOM	2358	OH2	WAT	113	3.017	25.140	10.851	1.00	23.53
	ATOM	2359	OH2	WAT	114	5.477	27.691	8.000	1.00	47.79
10	ATOM	2360	OH2	WAT	115	10.303	25.269	5.084	1.00	60.12
	ATOM	2361	OH2	WAT	116	5.786	22.265	9.161	1.00	51.44
	ATOM	2362	OH2	WAT	117	26.816	23.874	9.577	1.00	27.87
	ATOM	2363	OH2	WAT	118	31.291	18.845	10.672	1.00	40.15
	ATOM	2364	OH2	WAT	119	15.676	29.566	41.272	1.00	28.95
15	ATOM	2365	OH2	WAT	120	14.466	26.135	40.842	1.00	35.20
	ATOM	2366	OH2	WAT	121	36.037	23.319	51.451	1.00	19.77
	ATOM	2367	OH2	WAT	122	39.581	26.288	51.952	1.00	23.51
	ATOM	2368	OH2	WAT	123	42.528	27.670	50.228	1.00	24.63
	ATOM	2369	OH2	WAT	124	44.546	23.926	49.052	1.00	57.61
20	ATOM	2370	OH2	WAT	125	40.023	28.576	47.131	1.00	38.26
	ATOM	2371	OH2	WAT	126	30.006	22.980	58.432	1.00	43.07
	ATOM	2372	OH2	WAT	127	26.128	9.390	12.264	1.00	19.21
	ATOM	2373	OH2	WAT	128	27.172	6.564	12.815	1.00	35.46
	ATOM	2374	OH2	WAT	129	26.963	14.011	12.742	1.00	36.13
25	ATOM	2375	OH2	WAT	130	28.303	18.295	14.404	1.00	28.96
	ATOM	2376	OH2	WAT	131	24.031	15.269	20.692	1.00	48.88
	ATOM	2377	OH2	WAT	132	29.264	9.703	19.566	1.00	53.12
	ATOM	2378	OH2	WAT	133	17.989	30.518	10.979	1.00	25.47
	ATOM	2379	OH2	WAT	134	11.990	39.778	11.046	1.00	38.98
30	ATOM	2380	OH2	WAT	135	11.135	34.002	7.269	1.00	31.35
	ATOM	2381	OH2	WAT	136	3.675	32.379	11.688	1.00	42.88
	ATOM	2382	OH2	WAT	137	19.194	18.329	1.416	1.00	54.93
	ATOM	2383	OH2	WAT	138	29.343	36.491	19.061	1.00	57.53
	ATOM	2384	OH2	WAT	139	26.421	39.693	19.687	1.00	28.22
35	ATOM	2385	OH2	WAT	140	23.298	41.897	17.546	1.00	27.34
	ATOM	2386	OH2	WAT	141	21.627	44.076	18.974	1.00	49.29
	ATOM	2387	OH2	WAT	142	19.030	44.490	22.407	1.00	30.22
	ATOM	2388	OH2	WAT	143	20.677	19.612	52.476	1.00	47.14
	ATOM	2389	OH2	WAT	144	19.488	16.859	51.913	1.00	48.24
40	ATOM	2390	OH2	WAT	145	17.301	11.237	51.195	1.00	50.01
	ATOM	2391	OH2	WAT	146	13.220	10.587	40.098	1.00	43.73
	ATOM	2392	OH2	WAT	147	19.137	9.886	38.306	1.00	48.36
	ATOM	2393	OH2	WAT	148	8.558	15.164	38.060	1.00	39.18
	ATOM	2394	OH2	WAT	149	24.261	11.022	33.256	1.00	37.59
45	ATOM	2395	OH2	WAT	150	25.989	17.330	35.066	1.00	44.49
	ATOM	2396	OH2	WAT	151	25.997	14.655	30.354	1.00	45.30
	ATOM	2397	OH2	WAT	152	21.169	15.266	31.358	1.00	31.99
	ATOM	2398	OH2	WAT	153	29.183	17.439	28.415	1.00	46.53
	ATOM	2399	OH2	WAT	154	36.461	15.340	27.070	1.00	40.62
50	ATOM	2400	OH2	WAT	155	35.657	16.078	31.940	1.00	31.65
	ATOM	2401	OH2	WAT	156	24.883	42.087	33.016	1.00	48.49
	ATOM	2402	OH2	WAT	157	6.799	37.475	36.469	1.00	59.19
	ATOM	2403	OH2	WAT	158	10.345	41.204	37.883	1.00	49.50
	ATOM	2404	OH2	WAT	159	7.754	18.515	28.466	1.00	33.89
55	ATOM	2405	OH2	WAT	160	12.133	12.815	25.496	1.00	20.58
	ATOM	2406	OH2	WAT	161	17.629	18.048	25.474	1.00	20.91
	ATOM	2407	OH2	WAT	162	32.150	24.842	17.417	1.00	45.27
	ATOM	2408	OH2	WAT	163	29.679	28.436	17.333	1.00	27.94
	ATOM	2409	OH2	WAT	164	29.482	31.430	8.188	1.00	37.43
60	ATOM	2410	OH2	WAT	165	26.321	25.192	5.401	1.00	36.87
	ATOM	2411	OH2	WAT	166	20.427	31.093	10.497	1.00	28.10
	ATOM	2412	OH2	WAT	167	26.472	37.561	7.307	1.00	37.66

ATOM	2413	OH2	WAT	168	19.311	43.549	36.760	1.00	47.90
ATOM	2414	OH2	WAT	169	34.046	18.968	27.646	1.00	40.67
ATOM	2415	OH2	WAT	170	32.372	16.850	27.752	1.00	40.96

5

TABLE 2

**Atomic Coordinates for  
VEGFR2KD: N-Methyl-2-[3-(2-pyridin-2-yl-vinyl)-1H-indazol-6-ylsulfanyl]-  
benzamide (Compound 2)  
Complex Crystalline Structure**

10

15	ATOM	1	C	HIS	816	38.644	13.619	29.967	1.00	39.12
	ATOM	2	O	HIS	816	39.770	14.108	30.067	1.00	38.61
	ATOM	3	CB	HIS	816	39.606	12.376	27.867	1.00	40.54
	ATOM	4	CG	HIS	816	39.466	11.129	27.057	1.00	43.56
	ATOM	5	ND1	HIS	816	38.313	10.803	26.354	1.00	46.11
	ATOM	6	CE1	HIS	816	38.509	9.543	25.792	1.00	44.26
20	ATOM	7	CD2	HIS	816	40.376	10.060	26.912	1.00	43.38
	ATOM	8	NE2	HIS	816	39.772	9.107	26.142	1.00	42.62
	ATOM	9	HE2	HIS	816	40.155	8.253	25.844	1.00	0.00
	ATOM	10	HT1	HIS	816	37.097	13.765	27.602	1.00	0.00
	ATOM	11	HT2	HIS	816	36.297	12.523	28.477	1.00	0.00
25	ATOM	12	N	HIS	816	37.152	12.784	27.947	1.00	38.68
	ATOM	13	HT3	HIS	816	37.251	12.129	27.136	1.00	0.00
	ATOM	14	CA	HIS	816	38.350	12.560	28.828	1.00	39.93
	ATOM	15	N	CYS	817	37.654	13.991	30.856	1.00	38.18
	ATOM	16	H	CYS	817	36.795	13.526	30.806	1.00	0.00
30	ATOM	17	CA	CYS	817	37.782	15.022	31.986	1.00	36.83
	ATOM	18	CB	CYS	817	36.503	15.436	32.718	1.00	36.44
	ATOM	19	SG	CYS	817	35.238	16.001	31.620	1.00	42.71
	ATOM	20	C	CYS	817	38.617	14.641	33.186	1.00	35.03
	ATOM	21	O	CYS	817	38.905	15.495	34.005	1.00	33.39
35	ATOM	22	N	GLU	818	38.819	13.326	33.384	1.00	32.41
	ATOM	23	H	GLU	818	38.351	12.713	32.797	1.00	0.00
	ATOM	24	CA	GLU	818	39.634	12.806	34.489	1.00	31.13
	ATOM	25	CB	GLU	818	39.745	11.280	34.413	1.00	30.37
	ATOM	26	CG	GLU	818	38.445	10.511	34.548	1.00	29.13
40	ATOM	27	CD	GLU	818	37.624	10.483	33.259	1.00	30.28
	ATOM	28	OE1	GLU	818	36.488	10.042	33.387	1.00	30.12
	ATOM	29	OE2	GLU	818	38.074	10.833	32.164	1.00	26.18
	ATOM	30	C	GLU	818	41.046	13.383	34.440	1.00	31.56
	ATOM	31	O	GLU	818	41.694	13.458	35.456	1.00	32.34
45	ATOM	32	N	ARG	819	41.592	13.683	33.265	1.00	32.84
	ATOM	33	H	ARG	819	41.075	13.442	32.480	1.00	0.00
	ATOM	34	CA	ARG	819	42.970	14.250	33.073	1.00	36.73
	ATOM	35	CB	ARG	819	43.345	14.030	31.601	1.00	40.05
	ATOM	36	CG	ARG	819	42.411	14.979	30.787	1.00	48.69
50	ATOM	37	CD	ARG	819	42.680	15.203	29.313	1.00	56.73
	ATOM	38	NE	ARG	819	44.117	15.511	29.302	1.00	63.94
	ATOM	39	HE	ARG	819	44.533	15.903	30.096	1.00	0.00
	ATOM	40	CZ	ARG	819	44.918	15.183	28.286	1.00	68.24
	ATOM	41	NH1	ARG	819	44.444	14.542	27.196	1.00	70.53
55	ATOM	42	HH11	ARG	819	43.481	14.290	27.119	1.00	0.00
	ATOM	43	HH12	ARG	819	45.067	14.352	26.436	1.00	0.00
	ATOM	44	NH2	ARG	819	46.236	15.449	28.404	1.00	69.91
	ATOM	45	HH21	ARG	819	46.601	15.855	29.241	1.00	0.00
	ATOM	46	HH22	ARG	819	46.853	15.254	27.641	1.00	0.00
60	ATOM	47	C	ARG	819	43.127	15.757	33.419	1.00	35.88
	ATOM	48	O	ARG	819	44.225	16.293	33.596	1.00	35.29
	ATOM	49	N	LEU	820	41.961	16.442	33.372	1.00	34.79

	ATOM	50	H	LEU	820	41.176	15.881	33.255	1.00	0.00
	ATOM	51	CA	LEU	820	41.729	17.890	33.600	1.00	32.61
	ATOM	52	CB	LEU	820	40.197	18.133	33.352	1.00	32.03
	ATOM	53	CG	LEU	820	39.756	19.085	32.197	1.00	32.13
5	ATOM	54	CD1	LEU	820	40.822	19.079	31.067	1.00	32.44
	ATOM	55	CD2	LEU	820	38.311	18.713	31.772	1.00	28.77
	ATOM	56	C	LEU	820	42.175	18.414	34.971	1.00	31.74
	ATOM	57	O	LEU	820	42.013	17.736	35.995	1.00	30.49
	ATOM	58	N	PRO	821	42.698	19.671	35.074	1.00	31.55
10	ATOM	59	CD	PRO	821	42.949	20.672	34.001	1.00	29.67
	ATOM	60	CA	PRO	821	43.223	20.181	36.392	1.00	29.43
	ATOM	61	CB	PRO	821	44.241	21.277	36.007	1.00	29.90
	ATOM	62	CG	PRO	821	43.529	21.890	34.796	1.00	29.80
	ATOM	63	C	PRO	821	42.175	20.715	37.378	1.00	27.63
15	ATOM	64	O	PRO	821	41.106	21.223	36.980	1.00	23.27
	ATOM	65	N	TYR	822	42.529	20.609	38.664	1.00	24.48
	ATOM	66	H	TYR	822	43.340	20.126	38.912	1.00	0.00
	ATOM	67	CA	TYR	822	41.665	21.148	39.711	1.00	24.19
	ATOM	68	CB	TYR	822	40.883	20.120	40.662	1.00	21.36
20	ATOM	69	CG	TYR	822	40.151	20.922	41.712	1.00	19.70
	ATOM	70	CD1	TYR	822	40.524	20.839	43.054	1.00	19.18
	ATOM	71	CE1	TYR	822	39.913	21.661	43.998	1.00	18.58
	ATOM	72	CD2	TYR	822	39.141	21.836	41.352	1.00	18.93
	ATOM	73	CE2	TYR	822	38.519	22.662	42.296	1.00	16.68
25	ATOM	74	CZ	TYR	822	38.912	22.569	43.618	1.00	17.30
	ATOM	75	OH	TYR	822	38.263	23.303	44.570	1.00	16.64
	ATOM	76	HH	TYR	822	38.640	23.157	45.440	1.00	0.00
	ATOM	77	C	TYR	822	42.562	21.967	40.626	1.00	25.87
	ATOM	78	O	TYR	822	43.266	21.477	41.505	1.00	26.77
30	ATOM	79	N	ASP	823	42.571	23.275	40.365	1.00	25.83
	ATOM	80	H	ASP	823	42.032	23.554	39.594	1.00	0.00
	ATOM	81	CA	ASP	823	43.337	24.279	41.147	1.00	24.29
	ATOM	82	CB	ASP	823	43.543	25.511	40.253	1.00	23.76
	ATOM	83	CG	ASP	823	44.450	26.525	40.913	1.00	26.80
35	ATOM	84	OD1	ASP	823	44.772	26.387	42.082	1.00	26.12
	ATOM	85	OD2	ASP	823	44.853	27.476	40.264	1.00	27.77
	ATOM	86	C	ASP	823	42.658	24.685	42.484	1.00	22.63
	ATOM	87	O	ASP	823	41.982	25.714	42.611	1.00	21.21
	ATOM	88	N	ALA	824	42.875	23.897	43.523	1.00	20.20
40	ATOM	89	H	ALA	824	43.376	23.061	43.373	1.00	0.00
	ATOM	90	CA	ALA	824	42.270	24.195	44.820	1.00	20.96
	ATOM	91	CB	ALA	824	42.717	23.188	45.879	1.00	21.34
	ATOM	92	C	ALA	824	42.593	25.582	45.351	1.00	22.07
	ATOM	93	O	ALA	824	41.750	26.208	45.998	1.00	21.64
45	ATOM	94	N	SER	825	43.796	26.128	45.119	1.00	23.32
	ATOM	95	H	SER	825	44.491	25.667	44.610	1.00	0.00
	ATOM	96	CA	SER	825	44.037	27.486	45.666	1.00	25.20
	ATOM	97	CB	SER	825	45.481	28.013	45.487	1.00	26.75
	ATOM	98	OG	SER	825	46.083	27.514	44.319	1.00	31.48
50	ATOM	99	HG	SER	825	47.001	27.805	44.289	1.00	0.00
	ATOM	100	C	SER	825	43.111	28.487	45.014	1.00	25.68
	ATOM	101	O	SER	825	42.763	29.491	45.661	1.00	26.86
	ATOM	102	N	LYS	826	42.762	28.256	43.727	1.00	22.89
	ATOM	103	H	LYS	826	43.088	27.455	43.271	1.00	0.00
55	ATOM	104	CA	LYS	826	41.801	29.182	43.099	1.00	20.36
	ATOM	105	CB	LYS	826	41.937	29.153	41.553	1.00	17.34
	ATOM	106	CG	LYS	826	40.966	30.128	40.888	1.00	15.86
	ATOM	107	CD	LYS	826	41.348	30.362	39.448	1.00	19.71
	ATOM	108	CE	LYS	826	40.198	31.175	38.751	1.00	22.52
60	ATOM	109	NZ	LYS	826	40.534	31.237	37.314	1.00	22.04
	ATOM	110	HZ1	LYS	826	40.855	30.298	37.002	1.00	0.00
	ATOM	111	HZ2	LYS	826	41.308	31.918	37.181	1.00	0.00

	ATOM	112	HZ3	LYS	826	39.708	31.517	36.753	1.00	0.00
	ATOM	113	C	LYS	826	40.316	28.866	43.463	1.00	19.40
	ATOM	114	O	LYS	826	39.517	29.739	43.791	1.00	20.66
	ATOM	115	N	TRP	827	39.928	27.595	43.426	1.00	18.15
5	ATOM	116	H	TRP	827	40.604	26.912	43.257	1.00	0.00
	ATOM	117	CA	TRP	827	38.516	27.235	43.615	1.00	15.11
	ATOM	118	CB	TRP	827	38.158	26.134	42.628	1.00	12.70
	ATOM	119	CG	TRP	827	38.404	26.654	41.302	1.00	11.62
10	ATOM	120	CD2	TRP	827	37.578	27.598	40.649	1.00	13.45
	ATOM	121	CE2	TRP	827	38.180	27.822	39.388	1.00	14.06
	ATOM	122	CE3	TRP	827	36.409	28.273	41.028	1.00	11.48
	ATOM	123	CD1	TRP	827	39.487	26.354	40.437	1.00	11.34
	ATOM	124	NE1	TRP	827	39.329	27.044	39.277	1.00	12.70
	ATOM	125	HE1	TRP	827	39.837	26.953	38.448	1.00	0.00
15	ATOM	126	CZ2	TRP	827	37.566	28.724	38.500	1.00	16.15
	ATOM	127	CZ3	TRP	827	35.815	29.152	40.157	1.00	13.29
	ATOM	128	CH2	TRP	827	36.395	29.381	38.891	1.00	15.01
	ATOM	129	C	TRP	827	37.967	26.810	44.920	1.00	17.27
	ATOM	130	O	TRP	827	36.755	26.918	45.168	1.00	13.03
20	ATOM	131	N	GLU	828	38.884	26.260	45.747	1.00	17.50
	ATOM	132	H	GLU	828	39.843	26.330	45.571	1.00	0.00
	ATOM	133	CA	GLU	828	38.371	25.708	46.993	1.00	18.24
	ATOM	134	CB	GLU	828	39.570	24.935	47.609	1.00	17.73
	ATOM	135	CG	GLU	828	39.131	24.056	48.815	1.00	17.12
25	ATOM	136	CD	GLU	828	38.501	22.730	48.444	1.00	20.98
	ATOM	137	OE1	GLU	828	37.834	22.140	49.311	1.00	16.67
	ATOM	138	OE2	GLU	828	38.705	22.294	47.313	1.00	20.29
	ATOM	139	C	GLU	828	37.688	26.700	47.954	1.00	17.28
	ATOM	140	O	GLU	828	38.158	27.784	48.259	1.00	19.57
30	ATOM	141	N	PHE	829	36.542	26.334	48.502	1.00	19.72
	ATOM	142	H	PHE	829	36.192	25.459	48.243	1.00	0.00
	ATOM	143	CA	PHE	829	35.771	27.191	49.424	1.00	18.22
	ATOM	144	CB	PHE	829	34.411	27.604	48.733	1.00	17.89
	ATOM	145	CG	PHE	829	33.672	28.638	49.511	1.00	16.83
35	ATOM	146	CD1	PHE	829	34.186	29.937	49.585	1.00	15.75
	ATOM	147	CD2	PHE	829	32.436	28.316	50.127	1.00	17.29
	ATOM	148	CE1	PHE	829	33.443	30.925	50.270	1.00	17.58
	ATOM	149	CE2	PHE	829	31.704	29.314	50.802	1.00	19.65
	ATOM	150	CZ	PHE	829	32.208	30.632	50.867	1.00	15.89
40	ATOM	151	C	PHE	829	35.498	26.463	50.727	1.00	19.05
	ATOM	152	O	PHE	829	35.048	25.307	50.727	1.00	19.84
	ATOM	153	N	PRO	830	35.687	27.106	51.908	1.00	22.25
	ATOM	154	CD	PRO	830	36.115	28.538	52.128	1.00	20.70
	ATOM	155	CA	PRO	830	35.415	26.394	53.193	1.00	21.70
45	ATOM	156	CB	PRO	830	35.849	27.416	54.269	1.00	18.92
	ATOM	157	CG	PRO	830	36.752	28.379	53.507	1.00	20.16
	ATOM	158	C	PRO	830	33.956	25.917	53.349	1.00	22.68
	ATOM	159	O	PRO	830	33.009	26.707	53.284	1.00	22.31
	ATOM	160	N	ARG	831	33.700	24.627	53.605	1.00	23.52
50	ATOM	161	H	ARG	831	34.417	23.983	53.617	1.00	0.00
	ATOM	162	CA	ARG	831	32.269	24.189	53.759	1.00	27.42
	ATOM	163	CB	ARG	831	32.089	22.583	53.987	1.00	28.25
	ATOM	164	CG	ARG	831	31.701	21.656	52.722	1.00	34.10
	ATOM	165	CD	ARG	831	31.739	20.035	52.494	1.00	31.31
55	ATOM	166	NE	ARG	831	33.057	19.515	52.881	1.00	34.55
	ATOM	167	HE	ARG	831	33.277	19.699	53.821	1.00	0.00
	ATOM	168	CZ	ARG	831	34.047	18.867	52.223	1.00	31.23
	ATOM	169	NH1	ARG	831	35.039	18.635	53.057	1.00	33.41
	ATOM	170	HH11	ARG	831	34.969	18.947	54.006	1.00	0.00
60	ATOM	171	HH12	ARG	831	35.862	18.162	52.752	1.00	0.00
	ATOM	172	NH2	ARG	831	34.186	18.459	50.958	1.00	24.05
	ATOM	173	HH21	ARG	831	33.469	18.621	50.284	1.00	0.00



	ATOM	174	HH22	ARG	831	35.017	17.972	50.700	1.00	0.00
	ATOM	175	C	ARG	831	31.630	24.922	54.937	1.00	25.82
	ATOM	176	O	ARG	831	30.416	25.001	55.030	1.00	23.91
	ATOM	177	N	ASP	832	32.425	25.411	55.885	1.00	26.79
5	ATOM	178	H	ASP	832	33.393	25.279	55.846	1.00	0.00
	ATOM	179	CA	ASP	832	31.837	26.121	57.045	1.00	30.19
	ATOM	180	CB	ASP	832	32.841	26.122	58.273	1.00	33.50
	ATOM	181	CG	ASP	832	34.001	27.098	58.117	1.00	40.15
	ATOM	182	OD1	ASP	832	34.735	27.012	57.136	1.00	43.95
10	ATOM	183	OD2	ASP	832	34.168	27.968	58.986	1.00	48.04
	ATOM	184	C	ASP	832	31.403	27.552	56.699	1.00	28.37
	ATOM	185	O	ASP	832	30.710	28.204	57.473	1.00	30.95
	ATOM	186	N	ARG	833	31.909	28.132	55.603	1.00	26.68
	ATOM	187	H	ARG	833	32.560	27.646	55.065	1.00	0.00
15	ATOM	188	CA	ARG	833	31.478	29.474	55.204	1.00	24.42
	ATOM	189	CB	ARG	833	32.671	30.162	54.536	1.00	26.29
	ATOM	190	CG	ARG	833	33.874	30.280	55.460	1.00	27.45
	ATOM	191	CD	ARG	833	34.349	31.692	55.303	1.00	31.67
	ATOM	192	NE	ARG	833	35.639	31.825	54.607	1.00	37.43
20	ATOM	193	HE	ARG	833	35.638	32.044	53.655	1.00	0.00
	ATOM	194	CZ	ARG	833	36.848	31.584	55.157	1.00	37.26
	ATOM	195	NH1	ARG	833	37.997	31.764	54.464	1.00	38.46
	ATOM	196	HH11	ARG	833	37.957	32.084	53.517	1.00	0.00
	ATOM	197	HH12	ARG	833	38.887	31.592	54.884	1.00	0.00
25	ATOM	198	NH2	ARG	833	36.947	31.065	56.365	1.00	38.42
	ATOM	199	HH21	ARG	833	36.133	30.840	56.896	1.00	0.00
	ATOM	200	HH22	ARG	833	37.859	30.898	56.741	1.00	0.00
	ATOM	201	C	ARG	833	30.255	29.335	54.261	1.00	24.41
	ATOM	202	O	ARG	833	29.783	30.294	53.654	1.00	23.74
30	ATOM	203	N	LEU	834	29.689	28.122	54.162	1.00	23.65
	ATOM	204	H	LEU	834	30.062	27.388	54.691	1.00	0.00
	ATOM	205	CA	LEU	834	28.534	27.802	53.327	1.00	23.26
	ATOM	206	CB	LEU	834	28.984	26.739	52.322	1.00	22.96
	ATOM	207	CG	LEU	834	28.110	26.348	51.123	1.00	23.99
35	ATOM	208	CD1	LEU	834	27.990	27.467	50.036	1.00	20.59
	ATOM	209	CD2	LEU	834	28.817	25.129	50.477	1.00	23.64
	ATOM	210	C	LEU	834	27.371	27.330	54.170	1.00	23.32
	ATOM	211	O	LEU	834	27.447	26.447	55.016	1.00	24.87
	ATOM	212	N	LYS	835	26.263	28.040	54.052	1.00	23.37
40	ATOM	213	H	LYS	835	26.314	28.854	53.518	1.00	0.00
	ATOM	214	CA	LYS	835	25.047	27.686	54.787	1.00	22.24
	ATOM	215	CB	LYS	835	24.381	28.891	55.552	1.00	21.82
	ATOM	216	C	LYS	835	23.994	27.144	53.838	1.00	21.76
	ATOM	217	O	LYS	835	23.333	27.869	53.102	1.00	20.81
45	ATOM	218	N	LEU	836	23.839	25.852	53.871	1.00	21.30
	ATOM	219	H	LEU	836	24.445	25.329	54.424	1.00	0.00
	ATOM	220	CA	LEU	836	22.859	25.163	53.059	1.00	23.25
	ATOM	221	CB	LEU	836	23.169	23.700	53.045	1.00	23.47
	ATOM	222	CG	LEU	836	24.388	23.235	52.215	1.00	24.57
50	ATOM	223	CD1	LEU	836	25.676	23.971	52.512	1.00	26.18
	ATOM	224	CD2	LEU	836	24.582	21.764	52.594	1.00	25.31
	ATOM	225	C	LEU	836	21.418	25.340	53.484	1.00	24.66
	ATOM	226	O	LEU	836	21.053	25.185	54.657	1.00	26.55
	ATOM	227	N	GLY	837	20.570	25.597	52.496	1.00	22.79
55	ATOM	228	H	GLY	837	20.952	25.699	51.600	1.00	0.00
	ATOM	229	CA	GLY	837	19.119	25.787	52.696	1.00	21.51
	ATOM	230	C	GLY	837	18.229	24.768	51.987	1.00	22.24
	ATOM	231	O	GLY	837	18.444	23.553	51.988	1.00	22.82
	ATOM	232	N	LYS	838	17.183	25.230	51.337	1.00	22.89
60	ATOM	233	H	LYS	838	17.144	26.203	51.322	1.00	0.00
	ATOM	234	CA	LYS	838	16.196	24.416	50.611	1.00	23.66
	ATOM	235	CB	LYS	838	15.012	25.355	50.412	1.00	30.94

	ATOM	236	CG	LYS	838	13.664	24.735	50.776	1.00	41.94
	ATOM	237	CD	LYS	838	12.797	24.558	49.463	1.00	48.64
	ATOM	238	CE	LYS	838	11.473	23.720	49.617	1.00	52.11
	ATOM	239	NZ	LYS	838	10.661	24.186	50.778	1.00	56.35
5	ATOM	240	HZ1	LYS	838	10.610	25.227	50.796	1.00	0.00
	ATOM	241	HZ2	LYS	838	11.107	23.862	51.661	1.00	0.00
	ATOM	242	HZ3	LYS	838	9.697	23.802	50.714	1.00	0.00
	ATOM	243	C	LYS	838	16.682	23.792	49.282	1.00	20.29
	ATOM	244	O	LYS	838	17.493	24.382	48.575	1.00	18.42
10	ATOM	245	N	PRO	839	16.197	22.609	48.904	1.00	19.06
	ATOM	246	CD	PRO	839	15.193	21.760	49.609	1.00	19.35
	ATOM	247	CA	PRO	839	16.544	22.016	47.615	1.00	19.09
	ATOM	248	CB	PRO	839	16.075	20.562	47.664	1.00	18.42
	ATOM	249	CG	PRO	839	14.853	20.657	48.580	1.00	19.22
15	ATOM	250	C	PRO	839	15.874	22.769	46.458	1.00	20.31
	ATOM	251	O	PRO	839	14.768	23.310	46.548	1.00	18.73
	ATOM	252	N	LEU	840	16.661	22.957	45.421	1.00	18.44
	ATOM	253	H	LEU	840	17.598	22.737	45.551	1.00	0.00
	ATOM	254	CA	LEU	840	16.240	23.574	44.180	1.00	16.46
20	ATOM	255	CB	LEU	840	17.349	24.524	43.658	1.00	13.03
	ATOM	256	CG	LEU	840	17.650	25.685	44.587	1.00	11.28
	ATOM	257	CD1	LEU	840	18.906	26.381	44.022	1.00	11.73
	ATOM	258	CD2	LEU	840	16.363	26.550	44.809	1.00	11.17
	ATOM	259	C	LEU	840	15.975	22.417	43.199	1.00	17.90
25	ATOM	260	O	LEU	840	15.300	22.593	42.210	1.00	21.07
	ATOM	261	N	GLY	841	16.481	21.212	43.359	1.00	16.05
	ATOM	262	H	GLY	841	17.115	21.081	44.091	1.00	0.00
	ATOM	263	CA	GLY	841	16.186	20.098	42.429	1.00	15.21
	ATOM	264	C	GLY	841	16.768	18.804	42.976	1.00	17.35
30	ATOM	265	O	GLY	841	17.837	18.834	43.597	1.00	17.96
	ATOM	266	N	ARG	842	16.067	17.695	42.958	1.00	17.95
	ATOM	267	H	ARG	842	15.119	17.665	42.734	1.00	0.00
	ATOM	268	CA	ARG	842	16.772	16.480	43.388	1.00	22.83
	ATOM	269	CB	ARG	842	16.507	15.942	44.786	1.00	27.83
35	ATOM	270	CG	ARG	842	15.499	16.623	45.611	1.00	34.92
	ATOM	271	CD	ARG	842	16.165	16.890	46.971	1.00	42.06
	ATOM	272	NE	ARG	842	16.612	15.704	47.741	1.00	45.14
	ATOM	273	HE	ARG	842	17.023	14.947	47.281	1.00	0.00
	ATOM	274	CZ	ARG	842	16.406	15.611	49.075	1.00	49.30
40	ATOM	275	NH1	ARG	842	15.741	16.567	49.798	1.00	48.29
	ATOM	276	HH11	ARG	842	15.352	17.369	49.345	1.00	0.00
	ATOM	277	HH12	ARG	842	15.635	16.456	50.789	1.00	0.00
	ATOM	278	NH2	ARG	842	16.961	14.562	49.720	1.00	49.71
	ATOM	279	HH21	ARG	842	17.496	13.883	49.222	1.00	0.00
45	ATOM	280	HH22	ARG	842	16.846	14.467	50.711	1.00	0.00
	ATOM	281	C	ARG	842	16.411	15.314	42.530	1.00	21.56
	ATOM	282	O	ARG	842	15.302	15.255	42.013	1.00	23.71
	ATOM	283	N	GLY	843	17.406	14.497	42.231	1.00	18.14
	ATOM	284	H	GLY	843	18.277	14.674	42.644	1.00	0.00
50	ATOM	285	CA	GLY	843	17.215	13.298	41.430	1.00	18.57
	ATOM	286	C	GLY	843	17.382	12.120	42.368	1.00	21.06
	ATOM	287	O	GLY	843	17.094	12.230	43.576	1.00	20.61
	ATOM	288	N	ALA	844	17.798	10.982	41.817	1.00	21.20
	ATOM	289	H	ALA	844	17.998	10.955	40.858	1.00	0.00
55	ATOM	290	CA	ALA	844	17.994	9.777	42.688	1.00	24.78
	ATOM	291	CB	ALA	844	17.997	8.438	41.847	1.00	23.33
	ATOM	292	C	ALA	844	19.325	9.775	43.525	1.00	23.87
	ATOM	293	O	ALA	844	19.442	9.311	44.671	1.00	25.72
	ATOM	294	N	PHE	845	20.349	10.332	42.926	1.00	20.84
60	ATOM	295	H	PHE	845	20.083	10.740	42.087	1.00	0.00
	ATOM	296	CA	PHE	845	21.683	10.386	43.509	1.00	19.75
	ATOM	297	CB	PHE	845	22.646	9.685	42.555	1.00	21.12

	ATOM	298	CG	PHE	845	22.231	8.322	42.237	1.00	23.20
	ATOM	299	CD1	PHE	845	22.348	7.911	40.917	1.00	24.90
	ATOM	300	CD2	PHE	845	21.757	7.457	43.232	1.00	27.51
	ATOM	301	CE1	PHE	845	21.984	6.604	40.589	1.00	29.51
5	ATOM	302	CE2	PHE	845	21.386	6.135	42.914	1.00	30.76
	ATOM	303	CZ	PHE	845	21.506	5.720	41.587	1.00	29.91
	ATOM	304	C	PHE	845	22.207	11.777	43.801	1.00	19.67
	ATOM	305	O	PHE	845	23.260	11.917	44.454	1.00	17.26
	ATOM	306	N	GLY	846	21.583	12.805	43.221	1.00	15.44
10	ATOM	307	H	GLY	846	20.767	12.683	42.703	1.00	0.00
	ATOM	308	CA	GLY	846	22.123	14.121	43.479	1.00	13.95
	ATOM	309	C	GLY	846	21.099	15.146	43.783	1.00	13.84
	ATOM	310	O	GLY	846	19.898	14.929	43.702	1.00	14.30
	ATOM	311	N	GLN	847	21.611	16.312	44.057	1.00	12.69
15	ATOM	312	H	GLN	847	22.580	16.439	44.138	1.00	0.00
	ATOM	313	CA	GLN	847	20.695	17.421	44.351	1.00	15.16
	ATOM	314	CB	GLN	847	20.104	17.286	45.774	1.00	16.03
	ATOM	315	CG	GLN	847	21.220	17.405	46.817	1.00	16.77
	ATOM	316	CD	GLN	847	20.675	16.905	48.121	1.00	20.39
20	ATOM	317	OE1	GLN	847	19.551	17.200	48.518	1.00	21.15
	ATOM	318	NE2	GLN	847	21.461	16.088	48.806	1.00	19.87
	ATOM	319	HE21	GLN	847	22.349	15.819	48.489	1.00	0.00
	ATOM	320	HE22	GLN	847	21.104	15.772	49.657	1.00	0.00
	ATOM	321	C	GLN	847	21.365	18.773	44.249	1.00	12.74
25	ATOM	322	O	GLN	847	22.594	18.912	44.324	1.00	13.88
	ATOM	323	N	VAL	848	20.561	19.756	43.925	1.00	12.69
	ATOM	324	H	VAL	848	19.623	19.537	43.728	1.00	0.00
	ATOM	325	CA	VAL	848	21.062	21.137	43.889	1.00	12.74
	ATOM	326	CB	VAL	848	20.751	21.793	42.522	1.00	11.64
30	ATOM	327	CG1	VAL	848	21.065	23.302	42.550	1.00	11.60
	ATOM	328	CG2	VAL	848	21.671	21.212	41.458	1.00	8.77
	ATOM	329	C	VAL	848	20.305	21.832	45.061	1.00	14.00
	ATOM	330	O	VAL	848	19.078	21.702	45.265	1.00	13.12
	ATOM	331	N	ILE	849	21.033	22.512	45.928	1.00	15.33
35	ATOM	332	H	ILE	849	22.012	22.515	45.857	1.00	0.00
	ATOM	333	CA	ILE	849	20.339	23.162	47.042	1.00	18.14
	ATOM	334	CB	ILE	849	20.568	22.365	48.424	1.00	19.49
	ATOM	335	CG2	ILE	849	20.808	20.861	48.261	1.00	20.19
	ATOM	336	CG1	ILE	849	21.747	22.896	49.108	1.00	21.73
40	ATOM	337	CD1	ILE	849	20.851	23.348	50.238	1.00	21.14
	ATOM	338	C	ILE	849	20.774	24.584	47.158	1.00	16.43
	ATOM	339	O	ILE	849	21.895	24.963	46.789	1.00	14.77
	ATOM	340	N	GLU	850	19.809	25.415	47.482	1.00	16.82
	ATOM	341	H	GLU	850	18.903	25.077	47.593	1.00	0.00
45	ATOM	342	CA	GLU	850	20.107	26.848	47.685	1.00	16.50
	ATOM	343	CB	GLU	850	18.815	27.591	47.913	1.00	20.38
	ATOM	344	CG	GLU	850	19.048	29.095	47.653	1.00	24.70
	ATOM	345	CD	GLU	850	17.733	29.889	47.721	1.00	30.17
	ATOM	346	OE1	GLU	850	16.625	29.358	47.533	1.00	28.78
50	ATOM	347	OE2	GLU	850	17.855	31.094	47.959	1.00	35.61
	ATOM	348	C	GLU	850	21.015	27.090	48.878	1.00	16.75
	ATOM	349	O	GLU	850	20.880	26.413	49.879	1.00	16.61
	ATOM	350	N	ALA	851	21.924	28.019	48.837	1.00	16.42
	ATOM	351	H	ALA	851	22.044	28.576	48.038	1.00	0.00
55	ATOM	352	CA	ALA	851	22.754	28.194	50.013	1.00	17.59
	ATOM	353	CB	ALA	851	23.953	27.218	49.994	1.00	14.13
	ATOM	354	C	ALA	851	23.294	29.579	50.069	1.00	17.78
	ATOM	355	O	ALA	851	23.222	30.245	49.035	1.00	17.89
	ATOM	356	N	ASP	852	23.728	30.075	51.243	1.00	18.59
60	ATOM	357	H	ASP	852	23.578	29.525	52.035	1.00	0.00
	ATOM	358	CA	ASP	852	24.352	31.415	51.388	1.00	18.16
	ATOM	359	CB	ASP	852	23.736	32.281	52.491	1.00	22.39

	ATOM	360	CG	ASP	852	22.279	32.532	52.106	1.00	32.11
	ATOM	361	OD1	ASP	852	21.446	32.409	53.002	1.00	36.21
	ATOM	362	OD2	ASP	852	21.960	32.836	50.935	1.00	33.73
	ATOM	363	C	ASP	852	25.777	31.226	51.730	1.00	17.74
5	ATOM	364	O	ASP	852	26.113	30.457	52.645	1.00	17.84
	ATOM	365	N	ALA	853	26.605	31.794	50.885	1.00	17.04
	ATOM	366	H	ALA	853	26.230	32.310	50.143	1.00	0.00
	ATOM	367	CA	ALA	853	28.052	31.693	50.983	1.00	19.07
	ATOM	368	CB	ALA	853	28.606	31.208	49.632	1.00	18.44
10	ATOM	369	C	ALA	853	28.722	33.012	51.369	1.00	20.45
	ATOM	370	O	ALA	853	28.546	34.049	50.712	1.00	20.58
	ATOM	371	N	PHE	854	29.504	33.003	52.458	1.00	21.45
	ATOM	372	H	PHE	854	29.639	32.140	52.909	1.00	0.00
	ATOM	373	CA	PHE	854	30.191	34.229	52.941	1.00	19.79
15	ATOM	374	CB	PHE	854	30.454	34.114	54.487	1.00	18.52
	ATOM	375	CG	PHE	854	30.901	35.415	55.055	1.00	17.17
	ATOM	376	CD1	PHE	854	32.273	35.691	55.282	1.00	18.69
	ATOM	377	CD2	PHE	854	29.935	36.370	55.387	1.00	15.05
	ATOM	378	CE1	PHE	854	32.693	36.920	55.852	1.00	15.00
20	ATOM	379	CE2	PHE	854	30.345	37.575	55.953	1.00	15.41
	ATOM	380	CZ	PHE	854	31.697	37.841	56.183	1.00	13.10
	ATOM	381	C	PHE	854	31.464	34.562	52.227	1.00	18.99
	ATOM	382	O	PHE	854	32.466	33.880	52.388	1.00	21.10
	ATOM	383	N	GLY	855	31.447	35.555	51.393	1.00	17.85
25	ATOM	384	H	GLY	855	30.599	36.010	51.217	1.00	0.00
	ATOM	385	CA	GLY	855	32.628	35.987	50.671	1.00	18.86
	ATOM	386	C	GLY	855	33.078	35.062	49.561	1.00	21.52
	ATOM	387	O	GLY	855	34.246	35.116	49.199	1.00	23.50
	ATOM	388	N	ILE	856	32.219	34.235	48.968	1.00	19.73
30	ATOM	389	H	ILE	856	31.292	34.211	49.274	1.00	0.00
	ATOM	390	CA	ILE	856	32.757	33.376	47.897	1.00	19.84
	ATOM	391	CB	ILE	856	31.626	32.339	47.482	1.00	18.67
	ATOM	392	CG2	ILE	856	30.428	33.051	46.830	1.00	14.03
	ATOM	393	CG1	ILE	856	32.290	31.254	46.592	1.00	16.31
35	ATOM	394	CD1	ILE	856	31.413	30.021	46.571	1.00	15.88
	ATOM	395	C	ILE	856	33.278	34.191	46.683	1.00	20.90
	ATOM	396	O	ILE	856	34.277	33.821	46.094	1.00	21.85
	ATOM	397	N	ASP	857	32.704	35.319	46.318	1.00	21.16
	ATOM	398	H	ASP	857	31.943	35.625	46.850	1.00	0.00
40	ATOM	399	CA	ASP	857	33.196	36.055	45.157	1.00	26.29
	ATOM	400	CB	ASP	857	32.161	35.926	43.956	1.00	28.40
	ATOM	401	CG	ASP	857	30.683	36.381	44.188	1.00	33.97
	ATOM	402	OD1	ASP	857	30.394	37.101	45.174	1.00	33.50
	ATOM	403	OD2	ASP	857	29.829	36.033	43.339	1.00	30.42
45	ATOM	404	C	ASP	857	33.474	37.515	45.473	1.00	29.12
	ATOM	405	O	ASP	857	34.114	38.259	44.721	1.00	31.62
	ATOM	406	N	LYS	858	33.004	37.996	46.613	1.00	31.16
	ATOM	407	H	LYS	858	32.504	37.398	47.206	1.00	0.00
	ATOM	408	CA	LYS	858	33.275	39.410	46.974	1.00	32.72
50	ATOM	409	CB	LYS	858	32.055	40.296	46.735	1.00	35.69
	ATOM	410	CG	LYS	858	32.417	41.779	46.544	1.00	35.38
	ATOM	411	CD	LYS	858	31.123	42.623	46.356	1.00	34.63
	ATOM	412	CE	LYS	858	31.428	44.103	46.652	1.00	35.00
	ATOM	413	NZ	LYS	858	30.169	44.882	46.616	1.00	39.84
55	ATOM	414	HZ1	LYS	858	29.428	44.390	47.151	1.00	0.00
	ATOM	415	HZ2	LYS	858	29.874	45.012	45.629	1.00	0.00
	ATOM	416	HZ3	LYS	858	30.349	45.814	47.042	1.00	0.00
	ATOM	417	C	LYS	858	33.613	39.420	48.434	1.00	31.55
	ATOM	418	O	LYS	858	32.873	38.955	49.308	1.00	30.29
60	ATOM	419	N	THR	859	34.772	39.936	48.689	1.00	29.77
	ATOM	420	H	THR	859	35.305	40.299	47.964	1.00	0.00
	ATOM	421	CA	THR	859	35.283	39.977	50.067	1.00	31.19

	ATOM	422	CB	THR	859	36.556	40.909	50.214	1.00	31.81
	ATOM	423	OG1	THR	859	37.603	40.263	49.472	1.00	34.51
	ATOM	424	HG1	THR	859	38.431	40.731	49.604	1.00	0.00
	ATOM	425	CG2	THR	859	37.045	41.169	51.688	1.00	31.36
5	ATOM	426	C	THR	859	34.256	40.413	51.096	1.00	27.55
	ATOM	427	O	THR	859	33.614	41.449	50.988	1.00	27.92
	ATOM	428	N	ALA	860	34.052	39.485	52.000	1.00	24.95
	ATOM	429	H	ALA	860	34.374	38.613	51.707	1.00	0.00
	ATOM	430	CA	ALA	860	33.192	39.588	53.148	1.00	23.38
10	ATOM	431	CB	ALA	860	33.821	40.653	54.084	1.00	18.54
	ATOM	432	C	ALA	860	31.723	39.911	52.819	1.00	22.00
	ATOM	433	O	ALA	860	31.034	40.494	53.660	1.00	20.49
	ATOM	434	N	THR	861	31.197	39.527	51.636	1.00	22.19
	ATOM	435	H	THR	861	31.779	39.138	50.948	1.00	0.00
15	ATOM	436	CA	THR	861	29.756	39.789	51.375	1.00	22.93
	ATOM	437	CB	THR	861	29.509	40.916	50.204	1.00	22.98
	ATOM	438	OG1	THR	861	28.738	40.433	49.102	1.00	25.58
	ATOM	439	HG1	THR	861	28.558	41.176	48.510	1.00	0.00
	ATOM	440	CG2	THR	861	30.839	41.510	49.784	1.00	16.62
20	ATOM	441	C	THR	861	29.008	38.491	51.101	1.00	23.22
	ATOM	442	O	THR	861	29.525	37.569	50.448	1.00	22.80
	ATOM	443	N	CYS	862	27.997	38.312	51.955	1.00	22.26
	ATOM	444	H	CYS	862	27.808	39.055	52.577	1.00	0.00
	ATOM	445	CA	CYS	862	27.090	37.138	51.951	1.00	26.89
25	ATOM	446	CB	CYS	862	26.068	37.272	53.173	1.00	30.00
	ATOM	447	SG	CYS	862	26.704	37.950	54.931	1.00	50.72
	ATOM	448	C	CYS	862	26.414	37.082	50.536	1.00	27.13
	ATOM	449	O	CYS	862	25.940	38.058	49.965	1.00	24.57
	ATOM	450	N	ARG	863	26.497	35.933	49.842	1.00	25.74
30	ATOM	451	H	ARG	863	27.023	35.206	50.233	1.00	0.00
	ATOM	452	CA	ARG	863	25.955	35.767	48.466	1.00	23.72
	ATOM	453	CB	ARG	863	27.245	35.894	47.619	1.00	26.40
	ATOM	454	CG	ARG	863	27.500	35.188	46.323	1.00	31.17
	ATOM	455	CD	ARG	863	26.524	35.672	45.312	1.00	32.88
35	ATOM	456	NE	ARG	863	27.135	35.612	43.963	1.00	39.60
	ATOM	457	HE	ARG	863	27.927	36.156	43.816	1.00	0.00
	ATOM	458	CZ	ARG	863	26.614	34.982	42.872	1.00	39.23
	ATOM	459	NH1	ARG	863	27.351	35.103	41.734	1.00	33.37
	ATOM	460	HH11	ARG	863	28.205	35.627	41.731	1.00	0.00
40	ATOM	461	HH12	ARG	863	27.041	34.659	40.891	1.00	0.00
	ATOM	462	NH2	ARG	863	25.431	34.230	42.916	1.00	38.68
	ATOM	463	HH21	ARG	863	24.927	34.135	43.772	1.00	0.00
	ATOM	464	HH22	ARG	863	25.105	33.782	42.085	1.00	0.00
	ATOM	465	C	ARG	863	25.164	34.484	48.284	1.00	21.34
45	ATOM	466	O	ARG	863	25.633	33.414	48.669	1.00	21.78
	ATOM	467	N	THR	864	23.890	34.527	47.859	1.00	20.17
	ATOM	468	H	THR	864	23.437	35.393	47.759	1.00	0.00
	ATOM	469	CA	THR	864	23.159	33.267	47.620	1.00	17.79
	ATOM	470	CB	THR	864	21.687	33.493	47.383	1.00	19.29
50	ATOM	471	OG1	THR	864	21.195	34.166	48.528	1.00	21.36
	ATOM	472	HG1	THR	864	20.338	34.563	48.374	1.00	0.00
	ATOM	473	CG2	THR	864	20.915	32.185	47.259	1.00	16.58
	ATOM	474	C	THR	864	23.713	32.599	46.390	1.00	15.94
	ATOM	475	O	THR	864	23.905	33.177	45.316	1.00	15.24
55	ATOM	476	N	VAL	865	23.911	31.316	46.521	1.00	14.99
	ATOM	477	H	VAL	865	23.602	30.903	47.352	1.00	0.00
	ATOM	478	CA	VAL	865	24.486	30.426	45.481	1.00	13.50
	ATOM	479	CB	VAL	865	26.000	30.130	45.838	1.00	10.39
	ATOM	480	CG1	VAL	865	26.788	31.429	45.847	1.00	11.04
60	ATOM	481	CG2	VAL	865	26.100	29.344	47.188	1.00	7.95
	ATOM	482	C	VAL	865	23.669	29.091	45.379	1.00	11.74
	ATOM	483	O	VAL	865	22.748	28.812	46.183	1.00	12.93

	ATOM	484	N	ALA	866	23.923	28.336	44.264	1.00	11.20
	ATOM	485	H	ALA	866	24.534	28.705	43.584	1.00	0.00
	ATOM	486	CA	ALA	866	23.304	27.003	44.043	1.00	10.46
	ATOM	487	CB	ALA	866	22.635	26.855	42.636	1.00	9.79
5	ATOM	488	C	ALA	866	24.423	25.956	44.118	1.00	10.05
	ATOM	489	O	ALA	866	25.478	26.079	43.494	1.00	11.28
	ATOM	490	N	VAL	867	24.295	24.955	44.978	1.00	11.68
	ATOM	491	H	VAL	867	23.505	24.941	45.558	1.00	0.00
	ATOM	492	CA	VAL	867	25.335	23.906	45.093	1.00	13.68
10	ATOM	493	CB	VAL	867	26.187	23.941	46.529	1.00	14.58
	ATOM	494	CG1	VAL	867	25.677	25.078	47.410	1.00	12.82
	ATOM	495	CG2	VAL	867	26.268	22.606	47.214	1.00	11.71
	ATOM	496	C	VAL	867	24.818	22.523	44.836	1.00	10.77
	ATOM	497	O	VAL	867	23.735	22.091	45.238	1.00	11.68
15	ATOM	498	N	LYS	868	25.552	21.899	43.957	1.00	10.46
	ATOM	499	H	LYS	868	26.304	22.372	43.555	1.00	0.00
	ATOM	500	CA	LYS	868	25.233	20.530	43.580	1.00	9.73
	ATOM	501	CB	LYS	868	25.506	20.278	42.083	1.00	9.74
	ATOM	502	CG	LYS	868	25.013	18.911	41.565	1.00	9.56
20	ATOM	503	CD	LYS	868	25.214	18.690	40.079	1.00	8.12
	ATOM	504	CE	LYS	868	24.352	19.657	39.220	1.00	8.25
	ATOM	505	NZ	LYS	868	24.647	19.271	37.835	1.00	7.26
	ATOM	506	HZ1	LYS	868	24.638	18.234	37.749	1.00	0.00
	ATOM	507	HZ2	LYS	868	25.575	19.642	37.558	1.00	0.00
25	ATOM	508	HZ3	LYS	868	23.918	19.673	37.218	1.00	0.00
	ATOM	509	C	LYS	868	26.130	19.626	44.417	1.00	11.25
	ATOM	510	O	LYS	868	27.317	19.845	44.606	1.00	9.19
	ATOM	511	N	MET	869	25.533	18.565	44.911	1.00	12.26
	ATOM	512	H	MET	869	24.563	18.486	44.765	1.00	0.00
30	ATOM	513	CA	MET	869	26.231	17.547	45.745	1.00	13.48
	ATOM	514	CB	MET	869	26.340	18.062	47.246	1.00	11.40
	ATOM	515	CG	MET	869	24.933	18.232	47.850	1.00	18.20
	ATOM	516	SD	MET	869	24.842	19.218	49.379	1.00	25.16
	ATOM	517	CE	MET	869	25.599	17.880	50.338	1.00	28.52
35	ATOM	518	C	MET	869	25.433	16.265	45.666	1.00	11.36
	ATOM	519	O	MET	869	24.323	16.213	45.138	1.00	10.82
	ATOM	520	N	LEU	870	26.003	15.185	46.140	1.00	14.25
	ATOM	521	H	LEU	870	26.927	15.252	46.463	1.00	0.00
	ATOM	522	CA	LEU	870	25.343	13.884	46.151	1.00	15.03
40	ATOM	523	CB	LEU	870	26.432	12.769	46.150	1.00	12.93
	ATOM	524	CG	LEU	870	27.410	12.843	44.905	1.00	14.77
	ATOM	525	CD1	LEU	870	28.334	11.598	44.943	1.00	14.88
	ATOM	526	CD2	LEU	870	26.661	12.776	43.531	1.00	14.60
	ATOM	527	C	LEU	870	24.350	13.695	47.283	1.00	16.21
45	ATOM	528	O	LEU	870	24.255	14.434	48.239	1.00	17.66
	ATOM	529	N	LYS	871	23.606	12.652	47.199	1.00	16.93
	ATOM	530	H	LYS	871	23.758	12.082	46.413	1.00	0.00
	ATOM	531	CA	LYS	871	22.544	12.268	48.111	1.00	20.39
	ATOM	532	CB	LYS	871	21.196	12.248	47.362	1.00	21.86
50	ATOM	533	CG	LYS	871	20.402	13.470	47.378	1.00	24.33
	ATOM	534	CD	LYS	871	19.311	13.174	46.359	1.00	28.33
	ATOM	535	CE	LYS	871	18.025	12.602	46.953	1.00	31.37
	ATOM	536	NZ	LYS	871	18.088	11.137	47.091	1.00	38.80
	ATOM	537	HZ1	LYS	871	18.943	10.843	47.601	1.00	0.00
55	ATOM	538	HZ2	LYS	871	18.053	10.683	46.153	1.00	0.00
	ATOM	539	HZ3	LYS	871	17.246	10.825	47.622	1.00	0.00
	ATOM	540	C	LYS	871	22.759	10.838	48.575	1.00	19.14
	ATOM	541	O	LYS	871	23.414	10.036	47.904	1.00	19.15
	ATOM	542	N	GLU	872	22.130	10.457	49.652	1.00	20.40
60	ATOM	543	H	GLU	872	21.701	11.111	50.216	1.00	0.00
	ATOM	544	CA	GLU	872	22.197	9.071	50.122	1.00	22.02
	ATOM	545	CB	GLU	872	21.308	8.922	51.374	1.00	26.62

	ATOM	546	CG	GLU	872	21.094	7.468	51.885	1.00	36.24
	ATOM	547	CD	GLU	872	22.398	6.636	52.153	1.00	41.04
	ATOM	548	OE1	GLU	872	22.305	5.403	51.961	1.00	43.51
	ATOM	549	OE2	GLU	872	23.460	7.199	52.535	1.00	43.05
5	ATOM	550	C	GLU	872	21.739	8.205	48.973	1.00	20.27
	ATOM	551	O	GLU	872	20.729	8.484	48.322	1.00	23.79
	ATOM	552	N	GLY	873	22.466	7.165	48.677	1.00	18.69
	ATOM	553	H	GLY	873	23.244	6.974	49.230	1.00	0.00
	ATOM	554	CA	GLY	873	22.101	6.313	47.565	1.00	18.51
10	ATOM	555	C	GLY	873	23.144	6.357	46.488	1.00	18.79
	ATOM	556	O	GLY	873	23.354	5.409	45.727	1.00	20.59
	ATOM	557	N	ALA	874	23.791	7.499	46.343	1.00	17.64
	ATOM	558	H	ALA	874	23.532	8.272	46.896	1.00	0.00
	ATOM	559	CA	ALA	874	24.849	7.606	45.324	1.00	16.20
15	ATOM	560	CB	ALA	874	25.326	9.061	45.225	1.00	15.41
	ATOM	561	C	ALA	874	26.050	6.715	45.764	1.00	17.34
	ATOM	562	O	ALA	874	26.282	6.355	46.929	1.00	16.59
	ATOM	563	N	THR	875	26.952	6.477	44.834	1.00	17.68
	ATOM	564	H	THR	875	26.812	6.898	43.971	1.00	0.00
20	ATOM	565	CA	THR	875	28.133	5.647	45.031	1.00	15.86
	ATOM	566	CB	THR	875	28.015	4.342	44.156	1.00	18.80
	ATOM	567	OG1	THR	875	28.144	4.721	42.783	1.00	16.27
	ATOM	568	HG1	THR	875	27.829	4.041	42.177	1.00	0.00
	ATOM	569	CG2	THR	875	26.695	3.590	44.364	1.00	17.75
25	ATOM	570	C	THR	875	29.324	6.455	44.587	1.00	15.37
	ATOM	571	O	THR	875	29.233	7.548	44.027	1.00	14.44
	ATOM	572	N	HIS	876	30.505	5.918	44.736	1.00	15.83
	ATOM	573	H	HIS	876	30.605	5.070	45.195	1.00	0.00
	ATOM	574	CA	HIS	876	31.661	6.667	44.306	1.00	16.35
30	ATOM	575	C	HIS	876	31.681	6.958	42.802	1.00	16.30
	ATOM	576	O	HIS	876	32.330	7.897	42.338	1.00	17.06
	ATOM	577	CB	HIS	876	32.881	5.904	44.704	1.00	17.01
	ATOM	578	CG	HIS	876	34.046	6.698	44.285	1.00	19.06
	ATOM	579	ND1	HIS	876	34.396	7.909	44.805	1.00	15.71
35	ATOM	580	CE1	HIS	876	35.537	8.294	44.188	1.00	14.98
	ATOM	581	CD2	HIS	876	34.976	6.311	43.316	1.00	19.82
	ATOM	582	NE2	HIS	876	35.888	7.314	43.285	1.00	22.06
	ATOM	583	HE2	HIS	876	36.689	7.303	42.742	1.00	0.00
	ATOM	584	N	SER	877	30.994	6.206	41.955	1.00	15.61
40	ATOM	585	H	SER	877	30.523	5.410	42.282	1.00	0.00
	ATOM	586	CA	SER	877	31.015	6.501	40.507	1.00	15.13
	ATOM	587	CB	SER	877	30.430	5.284	39.718	1.00	18.01
	ATOM	588	OG	SER	877	29.026	5.340	39.627	1.00	27.09
	ATOM	589	HG	SER	877	28.734	4.429	39.479	1.00	0.00
45	ATOM	590	C	SER	877	30.263	7.798	40.276	1.00	13.38
	ATOM	591	O	SER	877	30.693	8.601	39.469	1.00	12.03
	ATOM	592	N	GLU	878	29.199	8.116	41.017	1.00	13.81
	ATOM	593	H	GLU	878	28.893	7.434	41.651	1.00	0.00
	ATOM	594	CA	GLU	878	28.482	9.422	40.898	1.00	13.30
50	ATOM	595	CB	GLU	878	27.198	9.460	41.694	1.00	11.59
	ATOM	596	CG	GLU	878	26.034	8.820	40.886	1.00	16.46
	ATOM	597	CD	GLU	878	26.107	7.294	40.943	1.00	21.54
	ATOM	598	OE1	GLU	878	26.374	6.726	42.002	1.00	22.59
	ATOM	599	OE2	GLU	878	25.896	6.638	39.940	1.00	21.48
55	ATOM	600	C	GLU	878	29.360	10.539	41.409	1.00	14.61
	ATOM	601	O	GLU	878	29.359	11.646	40.871	1.00	17.19
	ATOM	602	N	HIS	879	30.174	10.245	42.429	1.00	14.53
	ATOM	603	H	HIS	879	30.064	9.366	42.848	1.00	0.00
	ATOM	604	CA	HIS	879	31.164	11.179	42.972	1.00	13.18
60	ATOM	605	C	HIS	879	32.196	11.499	41.855	1.00	14.44
	ATOM	606	O	HIS	879	32.599	12.641	41.618	1.00	13.48
	ATOM	607	CB	HIS	879	31.871	10.499	44.140	1.00	13.05

	ATOM	608	CG	HIS	879	32.877	11.371	44.777	1.00	12.16
	ATOM	609	ND1	HIS	879	34.128	11.656	44.313	1.00	15.87
	ATOM	610	HD1	HIS	879	34.558	11.291	43.520	1.00	0.00
	ATOM	611	CD2	HIS	879	32.682	12.073	45.963	1.00	10.17
5	ATOM	612	NE2	HIS	879	33.773	12.817	46.219	1.00	12.32
	ATOM	613	CE1	HIS	879	34.693	12.549	45.202	1.00	13.14
	ATOM	614	N	ARG	880	32.671	10.477	41.138	1.00	13.49
	ATOM	615	H	ARG	880	32.463	9.563	41.432	1.00	0.00
	ATOM	616	CA	ARG	880	33.617	10.730	40.059	1.00	14.62
10	ATOM	617	CB	ARG	880	34.102	9.412	39.401	1.00	15.06
	ATOM	618	CG	ARG	880	34.787	8.445	40.317	1.00	16.69
	ATOM	619	CD	ARG	880	35.519	7.328	39.467	1.00	23.68
	ATOM	620	NE	ARG	880	34.736	6.086	39.571	1.00	29.10
	ATOM	621	HE	ARG	880	33.876	6.073	39.105	1.00	0.00
15	ATOM	622	CZ	ARG	880	35.042	4.952	40.234	1.00	27.39
	ATOM	623	NH1	ARG	880	34.126	4.012	40.168	1.00	30.27
	ATOM	624	HH11	ARG	880	33.296	4.168	39.639	1.00	0.00
	ATOM	625	HH12	ARG	880	34.254	3.141	40.637	1.00	0.00
	ATOM	626	NH2	ARG	880	36.151	4.685	40.914	1.00	27.03
20	ATOM	627	HH21	ARG	880	36.888	5.361	40.974	1.00	0.00
	ATOM	628	HH22	ARG	880	36.237	3.797	41.366	1.00	0.00
	ATOM	629	C	ARG	880	32.932	11.616	38.967	1.00	15.19
	ATOM	630	O	ARG	880	33.520	12.562	38.392	1.00	13.81
	ATOM	631	N	ALA	881	31.662	11.290	38.640	1.00	13.75
25	ATOM	632	H	ALA	881	31.242	10.548	39.121	1.00	0.00
	ATOM	633	CA	ALA	881	30.948	12.061	37.611	1.00	13.97
	ATOM	634	CB	ALA	881	29.605	11.450	37.421	1.00	10.50
	ATOM	635	C	ALA	881	30.808	13.544	38.033	1.00	15.00
	ATOM	636	O	ALA	881	30.962	14.464	37.223	1.00	14.61
30	ATOM	637	N	LEU	882	30.582	13.803	39.329	1.00	12.05
	ATOM	638	H	LEU	882	30.406	13.042	39.924	1.00	0.00
	ATOM	639	CA	LEU	882	30.486	15.188	39.878	1.00	12.56
	ATOM	640	CB	LEU	882	30.012	15.207	41.358	1.00	10.34
	ATOM	641	CG	LEU	882	29.649	16.587	41.955	1.00	8.74
35	ATOM	642	CD1	LEU	882	28.687	17.382	41.035	1.00	6.47
	ATOM	643	CD2	LEU	882	28.922	16.335	43.283	1.00	7.41
	ATOM	644	C	LEU	882	31.810	15.906	39.830	1.00	12.49
	ATOM	645	O	LEU	882	31.893	17.089	39.517	1.00	15.28
	ATOM	646	N	MET	883	32.868	15.214	40.200	1.00	13.01
40	ATOM	647	H	MET	883	32.749	14.299	40.528	1.00	0.00
	ATOM	648	CA	MET	883	34.212	15.806	40.153	1.00	15.06
	ATOM	649	CB	MET	883	35.256	14.813	40.749	1.00	17.54
	ATOM	650	CG	MET	883	36.684	15.413	40.741	1.00	21.25
	ATOM	651	SD	MET	883	36.907	16.883	41.840	1.00	22.22
45	ATOM	652	CE	MET	883	36.743	16.154	43.456	1.00	23.63
	ATOM	653	C	MET	883	34.557	16.103	38.688	1.00	15.95
	ATOM	654	O	MET	883	35.149	17.153	38.372	1.00	16.92
	ATOM	655	N	SER	884	34.258	15.214	37.708	1.00	14.57
	ATOM	656	H	SER	884	33.789	14.372	37.897	1.00	0.00
50	ATOM	657	CA	SER	884	34.640	15.650	36.317	1.00	14.10
	ATOM	658	CB	SER	884	34.667	14.334	35.444	1.00	13.31
	ATOM	659	OG	SER	884	33.337	14.011	35.258	1.00	24.99
	ATOM	660	HG	SER	884	33.237	13.209	34.729	1.00	0.00
	ATOM	661	C	SER	884	33.725	16.821	35.802	1.00	13.45
55	ATOM	662	O	SER	884	34.103	17.616	34.931	1.00	14.24
	ATOM	663	N	GLU	885	32.520	16.987	36.378	1.00	12.27
	ATOM	664	H	GLU	885	32.188	16.272	36.959	1.00	0.00
	ATOM	665	CA	GLU	885	31.607	18.101	36.072	1.00	10.72
	ATOM	666	CB	GLU	885	30.325	17.926	36.817	1.00	9.82
60	ATOM	667	CG	GLU	885	29.469	19.182	36.639	1.00	14.09
	ATOM	668	CD	GLU	885	28.037	18.923	37.098	1.00	19.03
	ATOM	669	OE1	GLU	885	27.542	17.782	36.980	1.00	26.53



	ATOM	670	OE2	GLU	885	27.420	19.880	37.566	1.00	16.61
	ATOM	671	C	GLU	885	32.267	19.409	36.510	1.00	12.62
	ATOM	672	O	GLU	885	32.274	20.430	35.807	1.00	12.33
	ATOM	673	N	LEU	886	32.838	19.356	37.716	1.00	13.13
5	ATOM	674	H	LEU	886	32.720	18.533	38.241	1.00	0.00
	ATOM	675	CA	LEU	886	33.579	20.497	38.298	1.00	13.02
	ATOM	676	CB	LEU	886	34.043	20.122	39.742	1.00	12.35
	ATOM	677	CG	LEU	886	35.068	21.088	40.446	1.00	14.26
	ATOM	678	CD1	LEU	886	34.462	22.506	40.605	1.00	9.80
10	ATOM	679	CD2	LEU	886	35.454	20.484	41.837	1.00	11.87
	ATOM	680	C	LEU	886	34.788	20.826	37.411	1.00	14.11
	ATOM	681	O	LEU	886	35.055	21.983	37.085	1.00	11.75
	ATOM	682	N	LYS	887	35.538	19.811	36.953	1.00	14.43
	ATOM	683	H	LYS	887	35.326	18.905	37.265	1.00	0.00
15	ATOM	684	CA	LYS	887	36.705	20.036	36.077	1.00	14.57
	ATOM	685	CB	LYS	887	37.468	18.694	35.864	1.00	11.81
	ATOM	686	CG	LYS	887	38.322	18.439	37.116	1.00	15.19
	ATOM	687	CD	LYS	887	38.871	17.038	36.949	1.00	17.96
	ATOM	688	CE	LYS	887	39.720	16.584	38.141	1.00	20.67
20	ATOM	689	NZ	LYS	887	40.037	15.137	37.973	1.00	24.28
	ATOM	690	HZ1	LYS	887	40.332	14.939	36.995	1.00	0.00
	ATOM	691	HZ2	LYS	887	39.204	14.562	38.215	1.00	0.00
	ATOM	692	HZ3	LYS	887	40.817	14.895	38.618	1.00	0.00
	ATOM	693	C	LYS	887	36.290	20.662	34.717	1.00	14.49
25	ATOM	694	O	LYS	887	36.953	21.562	34.184	1.00	13.71
	ATOM	695	N	ILE	888	35.198	20.192	34.117	1.00	16.24
	ATOM	696	H	ILE	888	34.741	19.431	34.528	1.00	0.00
	ATOM	697	CA	ILE	888	34.729	20.749	32.834	1.00	17.03
	ATOM	698	CB	ILE	888	33.638	19.771	32.225	1.00	19.65
30	ATOM	699	CG2	ILE	888	32.193	20.016	32.654	1.00	21.23
	ATOM	700	CG1	ILE	888	33.611	20.074	30.716	1.00	24.76
	ATOM	701	CD1	ILE	888	34.928	19.712	29.981	1.00	31.10
	ATOM	702	C	ILE	888	34.241	22.179	33.033	1.00	14.57
	ATOM	703	O	ILE	888	34.505	23.021	32.215	1.00	16.65
35	ATOM	704	N	LEU	889	33.551	22.546	34.080	1.00	16.14
	ATOM	705	H	LEU	889	33.300	21.840	34.706	1.00	0.00
	ATOM	706	CA	LEU	889	33.121	23.940	34.344	1.00	14.74
	ATOM	707	CB	LEU	889	32.275	24.025	35.652	1.00	16.30
	ATOM	708	CG	LEU	889	30.869	23.367	35.535	1.00	14.14
40	ATOM	709	CD1	LEU	889	30.131	23.327	36.891	1.00	9.58
	ATOM	710	CD2	LEU	889	30.040	24.238	34.530	1.00	15.80
	ATOM	711	C	LEU	889	34.330	24.842	34.499	1.00	14.87
	ATOM	712	O	LEU	889	34.306	25.994	34.106	1.00	13.66
	ATOM	713	N	ILE	890	35.392	24.378	35.148	1.00	14.96
45	ATOM	714	H	ILE	890	35.317	23.503	35.599	1.00	0.00
	ATOM	715	CA	ILE	890	36.652	25.146	35.235	1.00	15.19
	ATOM	716	CB	ILE	890	37.727	24.414	36.053	1.00	13.74
	ATOM	717	CG2	ILE	890	39.091	25.195	35.951	1.00	10.82
	ATOM	718	CG1	ILE	890	37.172	24.230	37.526	1.00	13.53
50	ATOM	719	CD1	ILE	890	38.110	23.521	38.496	1.00	12.02
	ATOM	720	C	ILE	890	37.180	25.332	33.814	1.00	15.50
	ATOM	721	O	ILE	890	37.554	26.436	33.439	1.00	19.10
	ATOM	722	N	HIS	891	37.253	24.250	33.031	1.00	14.36
	ATOM	723	H	HIS	891	37.060	23.376	33.435	1.00	0.00
55	ATOM	724	CA	HIS	891	37.728	24.302	31.630	1.00	15.07
	ATOM	725	C	HIS	891	36.893	25.282	30.783	1.00	15.70
	ATOM	726	O	HIS	891	37.398	26.138	30.080	1.00	15.56
	ATOM	727	CB	HIS	891	37.656	22.895	31.039	1.00	15.22
	ATOM	728	CG	HIS	891	37.849	23.014	29.588	1.00	20.02
60	ATOM	729	ND1	HIS	891	39.069	23.260	29.028	1.00	20.56
	ATOM	730	CE1	HIS	891	38.817	23.458	27.705	1.00	21.29
	ATOM	731	CD2	HIS	891	36.845	23.055	28.607	1.00	21.08

	ATOM	732	NE2	HIS	891	37.478	23.336	27.447	1.00	22.69
	ATOM	733	HE2	HIS	891	37.083	23.386	26.551	1.00	0.00
	ATOM	734	N	ILE	892	35.586	25.165	30.814	1.00	13.74
	ATOM	735	H	ILE	892	35.218	24.471	31.379	1.00	0.00
5	ATOM	736	CA	ILE	892	34.743	26.081	30.085	1.00	13.75
	ATOM	737	CB	ILE	892	33.297	25.646	30.313	1.00	13.50
	ATOM	738	CG2	ILE	892	32.304	26.769	29.893	1.00	16.56
	ATOM	739	CG1	ILE	892	33.081	24.353	29.520	1.00	11.27
	ATOM	740	CD1	ILE	892	31.893	23.508	30.042	1.00	11.55
10	ATOM	741	C	ILE	892	34.991	27.531	30.540	1.00	14.09
	ATOM	742	O	ILE	892	35.157	28.430	29.704	1.00	15.44
	ATOM	743	N	GLY	893	35.084	27.835	31.813	1.00	13.03
	ATOM	744	H	GLY	893	35.037	27.138	32.496	1.00	0.00
	ATOM	745	CA	GLY	893	35.281	29.234	32.184	1.00	14.16
15	ATOM	746	C	GLY	893	33.985	30.127	32.052	1.00	14.83
	ATOM	747	O	GLY	893	32.858	29.689	31.777	1.00	14.34
	ATOM	748	N	HIS	894	34.081	31.440	32.266	1.00	13.94
	ATOM	749	H	HIS	894	34.993	31.842	32.276	1.00	0.00
	ATOM	750	CA	HIS	894	32.904	32.296	32.304	1.00	15.87
20	ATOM	751	C	HIS	894	32.339	32.942	31.046	1.00	14.94
	ATOM	752	O	HIS	894	33.011	33.367	30.112	1.00	16.18
	ATOM	753	CB	HIS	894	33.097	33.422	33.352	1.00	20.86
	ATOM	754	CG	HIS	894	34.439	34.126	33.356	1.00	27.17
	ATOM	755	ND1	HIS	894	34.777	35.301	32.726	1.00	32.87
25	ATOM	756	CE1	HIS	894	36.100	35.610	32.964	1.00	28.32
	ATOM	757	CD2	HIS	894	35.627	33.728	33.994	1.00	31.71
	ATOM	758	NE2	HIS	894	36.627	34.625	33.748	1.00	30.23
	ATOM	759	HE2	HIS	894	37.568	34.406	33.819	1.00	0.00
	ATOM	760	N	HIS	895	31.009	33.020	31.066	1.00	12.95
30	ATOM	761	H	HIS	895	30.546	32.555	31.817	1.00	0.00
	ATOM	762	CA	HIS	895	30.250	33.713	30.044	1.00	12.37
	ATOM	763	C	HIS	895	28.971	34.050	30.773	1.00	11.82
	ATOM	764	O	HIS	895	28.505	33.406	31.696	1.00	10.91
	ATOM	765	CB	HIS	895	30.030	32.788	28.835	1.00	13.20
35	ATOM	766	CG	HIS	895	29.361	33.530	27.722	1.00	13.22
	ATOM	767	ND1	HIS	895	28.033	33.772	27.689	1.00	12.12
	ATOM	768	CE1	HIS	895	27.741	34.524	26.606	1.00	11.30
	ATOM	769	CD2	HIS	895	29.917	34.193	26.622	1.00	13.24
	ATOM	770	NE2	HIS	895	28.906	34.789	25.965	1.00	13.54
40	ATOM	771	HE2	HIS	895	28.934	35.181	25.063	1.00	0.00
	ATOM	772	N	LEU	896	28.440	35.180	30.412	1.00	12.35
	ATOM	773	H	LEU	896	28.825	35.631	29.651	1.00	0.00
	ATOM	774	CA	LEU	896	27.199	35.696	30.982	1.00	11.11
	ATOM	775	CB	LEU	896	26.761	36.979	30.196	1.00	10.73
45	ATOM	776	CG	LEU	896	25.393	37.521	30.586	1.00	13.11
	ATOM	777	CD1	LEU	896	25.635	38.262	31.875	1.00	16.15
	ATOM	778	CD2	LEU	896	24.745	38.412	29.533	1.00	16.56
	ATOM	779	C	LEU	896	26.102	34.652	30.849	1.00	12.16
	ATOM	780	O	LEU	896	25.194	34.470	31.689	1.00	13.78
50	ATOM	781	N	ASN	897	26.151	33.933	29.717	1.00	14.10
	ATOM	782	H	ASN	897	26.877	34.045	29.091	1.00	0.00
	ATOM	783	CA	ASN	897	25.033	32.992	29.493	1.00	14.23
	ATOM	784	CB	ASN	897	24.548	33.216	28.011	1.00	10.60
	ATOM	785	CG	ASN	897	24.000	34.632	27.850	1.00	8.89
55	ATOM	786	OD1	ASN	897	24.469	35.340	26.965	1.00	12.74
	ATOM	787	ND2	ASN	897	23.084	35.180	28.595	1.00	7.34
	ATOM	788	HD21	ASN	897	22.681	34.686	29.336	1.00	0.00
	ATOM	789	HD22	ASN	897	22.794	36.094	28.418	1.00	0.00
	ATOM	790	C	ASN	897	25.198	31.532	29.864	1.00	14.34
60	ATOM	791	O	ASN	897	24.442	30.698	29.312	1.00	12.83
	ATOM	792	N	VAL	898	26.181	31.206	30.689	1.00	13.20
	ATOM	793	H	VAL	898	26.762	31.931	31.055	1.00	0.00

	ATOM	794	CA	VAL	898	26.334	29.828	31.189	1.00	13.73
	ATOM	795	CB	VAL	898	27.633	29.120	30.748	1.00	14.00
	ATOM	796	CG1	VAL	898	27.734	29.036	29.182	1.00	12.91
	ATOM	797	CG2	VAL	898	28.844	29.918	31.243	1.00	18.54
5	ATOM	798	C	VAL	898	26.367	30.029	32.702	1.00	16.15
	ATOM	799	O	VAL	898	26.883	31.065	33.194	1.00	16.41
	ATOM	800	N	VAL	899	25.710	29.203	33.524	1.00	16.66
	ATOM	801	H	VAL	899	25.209	28.487	33.098	1.00	0.00
	ATOM	802	CA	VAL	899	25.733	29.335	35.011	1.00	13.41
10	ATOM	803	CB	VAL	899	24.875	28.190	35.586	1.00	12.36
	ATOM	804	CG1	VAL	899	25.663	26.851	35.795	1.00	12.29
	ATOM	805	CG2	VAL	899	24.258	28.716	36.811	1.00	14.14
	ATOM	806	C	VAL	899	27.257	29.266	35.325	1.00	14.63
	ATOM	807	O	VAL	899	28.008	28.414	34.837	1.00	14.08
15	ATOM	808	N	ASN	900	27.753	30.257	36.077	1.00	12.74
	ATOM	809	H	ASN	900	27.130	30.928	36.414	1.00	0.00
	ATOM	810	CA	ASN	900	29.216	30.265	36.346	1.00	15.48
	ATOM	811	CB	ASN	900	29.840	31.747	36.228	1.00	16.65
	ATOM	812	CG	ASN	900	29.719	32.202	34.726	1.00	19.76
20	ATOM	813	OD1	ASN	900	30.173	31.579	33.746	1.00	17.13
	ATOM	814	ND2	ASN	900	29.048	33.332	34.513	1.00	21.53
	ATOM	815	HD21	ASN	900	28.661	33.860	35.237	1.00	0.00
	ATOM	816	HD22	ASN	900	28.947	33.645	33.591	1.00	0.00
	ATOM	817	C	ASN	900	29.601	29.664	37.654	1.00	12.21
25	ATOM	818	O	ASN	900	28.936	29.816	38.663	1.00	11.48
	ATOM	819	N	LEU	901	30.678	28.933	37.585	1.00	14.90
	ATOM	820	H	LEU	901	31.008	28.734	36.684	1.00	0.00
	ATOM	821	CA	LEU	901	31.268	28.263	38.772	1.00	13.82
	ATOM	822	CB	LEU	901	32.419	27.360	38.327	1.00	13.42
30	ATOM	823	CG	LEU	901	33.208	26.599	39.393	1.00	12.13
	ATOM	824	CD1	LEU	901	32.270	25.608	40.082	1.00	13.07
	ATOM	825	CD2	LEU	901	34.401	25.926	38.729	1.00	10.01
	ATOM	826	C	LEU	901	31.814	29.320	39.716	1.00	13.75
	ATOM	827	O	LEU	901	32.565	30.202	39.284	1.00	13.14
35	ATOM	828	N	LEU	902	31.453	29.247	40.954	1.00	13.47
	ATOM	829	H	LEU	902	30.770	28.591	41.166	1.00	0.00
	ATOM	830	CA	LEU	902	31.945	30.199	41.988	1.00	13.27
	ATOM	831	CB	LEU	902	30.783	30.743	42.834	1.00	10.80
	ATOM	832	CG	LEU	902	29.758	31.494	41.993	1.00	8.78
40	ATOM	833	CD1	LEU	902	28.658	31.840	42.931	1.00	8.64
	ATOM	834	CD2	LEU	902	30.381	32.702	41.275	1.00	11.25
	ATOM	835	C	LEU	902	32.946	29.525	42.913	1.00	14.73
	ATOM	836	O	LEU	902	33.807	30.186	43.484	1.00	14.04
	ATOM	837	N	GLY	903	32.890	28.215	43.061	1.00	14.83
45	ATOM	838	H	GLY	903	32.183	27.712	42.610	1.00	0.00
	ATOM	839	CA	GLY	903	33.829	27.521	43.941	1.00	14.84
	ATOM	840	C	GLY	903	33.430	26.067	44.142	1.00	14.86
	ATOM	841	O	GLY	903	32.466	25.549	43.527	1.00	15.21
	ATOM	842	N	ALA	904	34.181	25.423	45.051	1.00	16.22
50	ATOM	843	H	ALA	904	34.944	25.898	45.458	1.00	0.00
	ATOM	844	CA	ALA	904	33.943	24.000	45.387	1.00	14.64
	ATOM	845	CB	ALA	904	34.593	23.023	44.357	1.00	14.27
	ATOM	846	C	ALA	904	34.498	23.569	46.715	1.00	13.72
	ATOM	847	O	ALA	904	35.480	24.102	47.201	1.00	13.85
55	ATOM	848	N	CYS	905	33.915	22.549	47.279	1.00	13.63
	ATOM	849	H	CYS	905	33.141	22.159	46.812	1.00	0.00
	ATOM	850	CA	CYS	905	34.385	21.978	48.550	1.00	13.62
	ATOM	851	CB	CYS	905	33.332	21.887	49.585	1.00	10.95
	ATOM	852	SG	CYS	905	32.487	23.476	49.837	1.00	17.33
60	ATOM	853	C	CYS	905	34.726	20.562	48.182	1.00	12.34
	ATOM	854	O	CYS	905	33.866	19.776	47.836	1.00	14.23
	ATOM	855	N	THR	906	36.005	20.281	48.010	1.00	14.19

	ATOM	856	H	THR	906	36.635	21.021	48.047	1.00	0.00
	ATOM	857	CA	THR	906	36.522	18.915	47.653	1.00	16.23
	ATOM	858	CB	THR	906	37.374	19.009	46.365	1.00	14.52
	ATOM	859	OG1	THR	906	38.530	19.728	46.736	1.00	14.01
5	ATOM	860	HG1	THR	906	39.238	19.626	46.092	1.00	0.00
	ATOM	861	CG2	THR	906	36.668	19.719	45.170	1.00	13.52
	ATOM	862	C	THR	906	37.382	18.235	48.787	1.00	19.87
	ATOM	863	O	THR	906	37.774	17.063	48.724	1.00	19.63
	ATOM	864	N	LYS	907	37.669	18.962	49.900	1.00	22.16
10	ATOM	865	H	LYS	907	37.280	19.853	49.972	1.00	0.00
	ATOM	866	CA	LYS	907	38.484	18.434	50.996	1.00	22.66
	ATOM	867	CB	LYS	907	38.564	19.475	52.174	1.00	20.32
	ATOM	868	C	LYS	907	37.885	17.120	51.504	1.00	23.58
	ATOM	869	O	LYS	907	36.677	16.976	51.611	1.00	19.77
15	ATOM	870	N	PRO	908	38.743	16.123	51.785	1.00	25.80
	ATOM	871	CD	PRO	908	40.095	15.964	51.288	1.00	24.87
	ATOM	872	CA	PRO	908	38.321	14.836	52.355	1.00	26.87
	ATOM	873	CB	PRO	908	39.629	14.064	52.639	1.00	26.07
	ATOM	874	CG	PRO	908	40.658	15.137	52.441	1.00	27.75
20	ATOM	875	C	PRO	908	37.403	14.854	53.540	1.00	26.34
	ATOM	876	O	PRO	908	36.615	13.926	53.704	1.00	28.47
	ATOM	877	N	GLY	909	37.377	15.825	54.434	1.00	26.65
	ATOM	878	H	GLY	909	37.969	16.599	54.372	1.00	0.00
	ATOM	879	CA	GLY	909	36.349	15.640	55.559	1.00	30.09
25	ATOM	880	C	GLY	909	34.796	15.370	55.324	1.00	28.00
	ATOM	881	O	GLY	909	34.047	14.826	56.160	1.00	25.68
	ATOM	882	N	GLY	910	34.295	15.855	54.169	1.00	25.82
	ATOM	883	H	GLY	910	34.930	16.204	53.506	1.00	0.00
	ATOM	884	CA	GLY	910	32.877	15.790	53.822	1.00	21.05
30	ATOM	885	C	GLY	910	32.627	15.660	52.320	1.00	18.76
	ATOM	886	O	GLY	910	33.501	15.226	51.546	1.00	16.41
	ATOM	887	N	PRO	911	31.359	15.944	51.951	1.00	18.47
	ATOM	888	CD	PRO	911	30.308	16.529	52.802	1.00	18.27
	ATOM	889	CA	PRO	911	30.860	15.663	50.584	1.00	17.24
35	ATOM	890	CB	PRO	911	29.375	15.665	50.719	1.00	17.52
	ATOM	891	CG	PRO	911	29.112	16.652	51.836	1.00	16.70
	ATOM	892	C	PRO	911	31.319	16.618	49.494	1.00	16.65
	ATOM	893	O	PRO	911	31.622	17.781	49.771	1.00	13.36
	ATOM	894	N	LEU	912	31.525	16.111	48.264	1.00	15.21
40	ATOM	895	H	LEU	912	31.408	15.149	48.124	1.00	0.00
	ATOM	896	CA	LEU	912	31.944	17.021	47.158	1.00	15.31
	ATOM	897	CB	LEU	912	32.296	16.164	45.930	1.00	14.16
	ATOM	898	CG	LEU	912	32.612	16.895	44.600	1.00	15.67
	ATOM	899	CD1	LEU	912	33.761	17.914	44.703	1.00	15.72
45	ATOM	900	CD2	LEU	912	32.946	15.762	43.574	1.00	13.95
	ATOM	901	C	LEU	912	30.775	18.005	46.868	1.00	13.39
	ATOM	902	O	LEU	912	29.591	17.626	46.803	1.00	12.84
	ATOM	903	N	MET	913	31.096	19.273	46.724	1.00	12.45
	ATOM	904	H	MET	913	32.039	19.519	46.851	1.00	0.00
50	ATOM	905	CA	MET	913	30.084	20.290	46.470	1.00	13.51
	ATOM	906	CB	MET	913	29.846	21.164	47.714	1.00	13.67
	ATOM	907	CG	MET	913	29.403	20.259	48.869	1.00	20.74
	ATOM	908	SD	MET	913	28.999	21.300	50.278	1.00	27.33
	ATOM	909	CE	MET	913	27.525	20.473	50.704	1.00	22.61
55	ATOM	910	C	MET	913	30.614	21.181	45.376	1.00	12.84
	ATOM	911	O	MET	913	31.780	21.597	45.435	1.00	12.13
	ATOM	912	N	VAL	914	29.739	21.466	44.387	1.00	12.96
	ATOM	913	H	VAL	914	28.860	21.030	44.437	1.00	0.00
	ATOM	914	CA	VAL	914	30.070	22.320	43.229	1.00	9.11
60	ATOM	915	CB	VAL	914	29.902	21.508	41.889	1.00	10.67
	ATOM	916	CG1	VAL	914	30.305	22.396	40.671	1.00	8.37
	ATOM	917	CG2	VAL	914	30.806	20.216	41.964	1.00	5.03

	ATOM	918	C	VAL	914	29.092	23.469	43.326	1.00	9.81
	ATOM	919	O	VAL	914	27.879	23.286	43.263	1.00	9.77
	ATOM	920	N	ILE	915	29.688	24.648	43.542	1.00	10.77
	ATOM	921	H	ILE	915	30.669	24.660	43.541	1.00	0.00
5	ATOM	922	CA	ILE	915	28.998	25.918	43.755	1.00	10.86
	ATOM	923	CB	ILE	915	29.661	26.682	44.962	1.00	10.11
	ATOM	924	CG2	ILE	915	28.769	27.895	45.383	1.00	8.97
	ATOM	925	CG1	ILE	915	29.840	25.698	46.156	1.00	11.93
	ATOM	926	CD1	ILE	915	30.902	26.189	47.135	1.00	13.57
10	ATOM	927	C	ILE	915	28.961	26.836	42.538	1.00	11.04
	ATOM	928	O	ILE	915	29.994	27.216	42.015	1.00	11.73
	ATOM	929	N	VAL	916	27.769	27.170	42.080	1.00	11.04
	ATOM	930	H	VAL	916	26.979	26.803	42.534	1.00	0.00
	ATOM	931	CA	VAL	916	27.595	28.079	40.919	1.00	11.96
15	ATOM	932	CB	VAL	916	27.044	27.322	39.611	1.00	10.66
	ATOM	933	CG1	VAL	916	28.025	26.246	39.105	1.00	9.22
	ATOM	934	CG2	VAL	916	25.647	26.715	39.948	1.00	7.76
	ATOM	935	C	VAL	916	26.591	29.203	41.266	1.00	12.00
	ATOM	936	O	VAL	916	25.937	29.255	42.334	1.00	12.56
20	ATOM	937	N	GLU	917	26.488	30.182	40.363	1.00	13.08
	ATOM	938	H	GLU	917	27.070	30.116	39.576	1.00	0.00
	ATOM	939	CA	GLU	917	25.529	31.308	40.542	1.00	13.66
	ATOM	940	CB	GLU	917	25.358	32.166	39.236	1.00	16.76
	ATOM	941	CG	GLU	917	26.769	32.642	38.993	1.00	20.20
25	ATOM	942	CD	GLU	917	26.873	33.418	37.686	1.00	27.74
	ATOM	943	OE1	GLU	917	27.211	34.610	37.787	1.00	31.60
	ATOM	944	OE2	GLU	917	26.620	32.837	36.615	1.00	23.87
	ATOM	945	C	GLU	917	24.113	30.837	40.839	1.00	14.51
	ATOM	946	O	GLU	917	23.673	29.851	40.223	1.00	15.96
30	ATOM	947	N	PHE	918	23.372	31.568	41.685	1.00	13.12
	ATOM	948	H	PHE	918	23.809	32.342	42.093	1.00	0.00
	ATOM	949	CA	PHE	918	21.968	31.300	41.966	1.00	11.78
	ATOM	950	CB	PHE	918	21.605	31.783	43.351	1.00	13.55
	ATOM	951	CG	PHE	918	20.174	31.619	43.632	1.00	14.06
35	ATOM	952	CD1	PHE	918	19.593	30.360	43.688	1.00	15.10
	ATOM	953	CD2	PHE	918	19.393	32.744	43.856	1.00	15.48
	ATOM	954	CE1	PHE	918	18.229	30.236	43.982	1.00	19.00
	ATOM	955	CE2	PHE	918	18.027	32.597	44.154	1.00	17.39
	ATOM	956	CZ	PHE	918	17.413	31.347	44.225	1.00	17.31
40	ATOM	957	C	PHE	918	21.208	32.172	40.910	1.00	13.10
	ATOM	958	O	PHE	918	21.465	33.365	40.703	1.00	13.32
	ATOM	959	N	CYS	919	20.208	31.611	40.266	1.00	13.28
	ATOM	960	H	CYS	919	20.046	30.682	40.504	1.00	0.00
	ATOM	961	CA	CYS	919	19.336	32.256	39.219	1.00	13.58
45	ATOM	962	CB	CYS	919	19.345	31.418	37.918	1.00	9.79
	ATOM	963	SG	CYS	919	20.995	31.366	37.196	1.00	14.47
	ATOM	964	C	CYS	919	17.914	32.297	39.788	1.00	12.95
	ATOM	965	O	CYS	919	17.188	31.309	39.799	1.00	13.90
	ATOM	966	N	LYS	920	17.561	33.468	40.282	1.00	14.69
50	ATOM	967	H	LYS	920	18.250	34.146	40.212	1.00	0.00
	ATOM	968	CA	LYS	920	16.290	33.877	40.908	1.00	17.94
	ATOM	969	CB	LYS	920	16.060	35.426	40.610	1.00	20.97
	ATOM	970	CG	LYS	920	15.875	36.389	41.751	1.00	27.53
	ATOM	971	CD	LYS	920	17.087	35.968	42.656	1.00	37.07
55	ATOM	972	CE	LYS	920	17.986	37.040	43.399	1.00	38.58
	ATOM	973	NZ	LYS	920	19.299	36.462	43.736	1.00	36.98
	ATOM	974	HZ1	LYS	920	19.735	36.119	42.860	1.00	0.00
	ATOM	975	HZ2	LYS	920	19.175	35.684	44.414	1.00	0.00
	ATOM	976	HZ3	LYS	920	19.882	37.208	44.166	1.00	0.00
60	ATOM	977	C	LYS	920	15.006	33.132	40.479	1.00	17.07
	ATOM	978	O	LYS	920	14.234	32.608	41.274	1.00	15.03
	ATOM	979	N	PHE	921	14.740	33.124	39.192	1.00	16.05

	ATOM	980	H	PHE	921	15.389	33.491	38.565	1.00	0.00
	ATOM	981	CA	PHE	921	13.517	32.565	38.649	1.00	14.85
	ATOM	982	CB	PHE	921	13.202	33.470	37.430	1.00	16.68
	ATOM	983	CG	PHE	921	12.916	34.845	37.872	1.00	16.40
5	ATOM	984	CD1	PHE	921	11.672	35.158	38.477	1.00	23.57
	ATOM	985	CD2	PHE	921	13.873	35.844	37.680	1.00	16.60
	ATOM	986	CE1	PHE	921	11.399	36.487	38.882	1.00	23.79
	ATOM	987	CE2	PHE	921	13.636	37.169	38.070	1.00	21.22
	ATOM	988	CZ	PHE	921	12.397	37.480	38.671	1.00	25.48
10	ATOM	989	C	PHE	921	13.443	31.123	38.319	1.00	13.49
	ATOM	990	O	PHE	921	12.400	30.616	37.910	1.00	15.83
	ATOM	991	N	GLY	922	14.554	30.440	38.421	1.00	12.47
	ATOM	992	H	GLY	922	15.375	30.895	38.701	1.00	0.00
	ATOM	993	CA	GLY	922	14.523	29.006	38.091	1.00	13.53
15	ATOM	994	C	GLY	922	14.573	28.677	36.589	1.00	13.20
	ATOM	995	O	GLY	922	14.912	29.531	35.744	1.00	14.40
	ATOM	996	N	ASN	923	14.200	27.438	36.253	1.00	12.52
	ATOM	997	H	ASN	923	13.898	26.838	36.970	1.00	0.00
	ATOM	998	CA	ASN	923	14.235	27.033	34.863	1.00	12.68
20	ATOM	999	CB	ASN	923	14.150	25.500	34.849	1.00	14.05
	ATOM	1000	CG	ASN	923	12.744	24.948	34.771	1.00	17.84
	ATOM	1001	OD1	ASN	923	12.136	24.813	33.704	1.00	19.20
	ATOM	1002	ND2	ASN	923	12.106	24.628	35.881	1.00	19.07
	ATOM	1003	HD21	ASN	923	12.526	24.769	36.762	1.00	0.00
25	ATOM	1004	HD22	ASN	923	11.206	24.266	35.784	1.00	0.00
	ATOM	1005	C	ASN	923	13.173	27.736	34.007	1.00	12.41
	ATOM	1006	O	ASN	923	12.018	28.007	34.382	1.00	13.67
	ATOM	1007	N	LEU	924	13.594	27.890	32.765	1.00	13.02
	ATOM	1008	H	LEU	924	14.445	27.484	32.517	1.00	0.00
30	ATOM	1009	CA	LEU	924	12.839	28.607	31.772	1.00	12.69
	ATOM	1010	CB	LEU	924	13.769	28.864	30.556	1.00	12.38
	ATOM	1011	CG	LEU	924	13.226	29.914	29.560	1.00	11.67
	ATOM	1012	CD1	LEU	924	13.101	31.297	30.252	1.00	12.30
	ATOM	1013	CD2	LEU	924	14.141	29.906	28.328	1.00	12.81
35	ATOM	1014	C	LEU	924	11.584	27.926	31.359	1.00	13.25
	ATOM	1015	O	LEU	924	10.596	28.623	31.115	1.00	12.81
	ATOM	1016	N	SER	925	11.568	26.601	31.309	1.00	12.12
	ATOM	1017	H	SER	925	12.389	26.119	31.534	1.00	0.00
	ATOM	1018	CA	SER	925	10.331	25.905	30.901	1.00	15.80
40	ATOM	1019	CB	SER	925	10.671	24.414	30.833	1.00	13.89
	ATOM	1020	OG	SER	925	9.435	23.742	30.576	1.00	21.06
	ATOM	1021	HG	SER	925	9.522	22.790	30.468	1.00	0.00
	ATOM	1022	C	SER	925	9.115	26.192	31.842	1.00	15.93
	ATOM	1023	O	SER	925	8.029	26.668	31.489	1.00	14.03
45	ATOM	1024	N	THR	926	9.344	25.973	33.130	1.00	13.18
	ATOM	1025	H	THR	926	10.222	25.589	33.335	1.00	0.00
	ATOM	1026	CA	THR	926	8.371	26.216	34.195	1.00	13.87
	ATOM	1027	CB	THR	926	9.009	25.768	35.525	1.00	14.33
	ATOM	1028	OG1	THR	926	9.249	24.349	35.481	1.00	14.49
50	ATOM	1029	HG1	THR	926	9.473	24.050	36.373	1.00	0.00
	ATOM	1030	CG2	THR	926	8.104	26.110	36.730	1.00	17.44
	ATOM	1031	C	THR	926	8.020	27.691	34.215	1.00	13.66
	ATOM	1032	O	THR	926	6.892	28.148	34.365	1.00	13.96
	ATOM	1033	N	TYR	927	9.038	28.540	34.127	1.00	14.23
55	ATOM	1034	H	TYR	927	9.959	28.217	34.008	1.00	0.00
	ATOM	1035	CA	TYR	927	8.751	29.990	34.124	1.00	14.25
	ATOM	1036	CB	TYR	927	10.109	30.802	34.112	1.00	12.67
	ATOM	1037	CG	TYR	927	9.830	32.246	34.031	1.00	13.31
	ATOM	1038	CD1	TYR	927	9.425	32.931	35.185	1.00	16.73
60	ATOM	1039	CE1	TYR	927	9.125	34.300	35.128	1.00	14.82
	ATOM	1040	CD2	TYR	927	9.940	32.935	32.793	1.00	17.12
	ATOM	1041	CE2	TYR	927	9.642	34.315	32.712	1.00	15.81

	ATOM	1042	CZ	TYR	927	9.242	34.972	33.904	1.00	19.00
	ATOM	1043	OH	TYR	927	9.021	36.335	33.937	1.00	21.47
	ATOM	1044	HH	TYR	927	9.336	36.762	33.132	1.00	0.00
	ATOM	1045	C	TYR	927	7.852	30.428	32.941	1.00	12.88
5	ATOM	1046	O	TYR	927	6.815	31.008	33.159	1.00	12.26
	ATOM	1047	N	LEU	928	8.192	30.227	31.700	1.00	13.69
	ATOM	1048	H	LEU	928	9.021	29.735	31.529	1.00	0.00
	ATOM	1049	CA	LEU	928	7.345	30.634	30.556	1.00	13.88
	ATOM	1050	CB	LEU	928	7.982	30.117	29.235	1.00	13.65
10	ATOM	1051	CG	LEU	928	9.317	30.796	28.927	1.00	11.45
	ATOM	1052	CD1	LEU	928	9.861	30.129	27.650	1.00	13.54
	ATOM	1053	CD2	LEU	928	9.172	32.366	28.831	1.00	15.16
	ATOM	1054	C	LEU	928	5.927	30.091	30.675	1.00	15.55
	ATOM	1055	O	LEU	928	4.961	30.767	30.331	1.00	16.93
15	ATOM	1056	N	ARG	929	5.783	28.856	31.172	1.00	16.97
	ATOM	1057	H	ARG	929	6.594	28.337	31.364	1.00	0.00
	ATOM	1058	CA	ARG	929	4.473	28.218	31.322	1.00	17.56
	ATOM	1059	CB	ARG	929	4.752	26.808	31.693	1.00	19.04
	ATOM	1060	CG	ARG	929	3.675	25.908	31.157	1.00	25.06
20	ATOM	1061	CD	ARG	929	4.304	24.529	31.219	1.00	35.73
	ATOM	1062	NE	ARG	929	4.892	24.241	32.567	1.00	43.55
	ATOM	1063	HE	ARG	929	4.432	24.582	33.363	1.00	0.00
	ATOM	1064	CZ	ARG	929	6.042	23.567	32.757	1.00	43.64
	ATOM	1065	NH1	ARG	929	6.407	23.370	34.023	1.00	47.95
25	ATOM	1066	HH11	ARG	929	5.855	23.713	34.783	1.00	0.00
	ATOM	1067	HH12	ARG	929	7.258	22.876	34.217	1.00	0.00
	ATOM	1068	NH2	ARG	929	6.845	23.153	31.753	1.00	42.44
	ATOM	1069	HH21	ARG	929	6.597	23.349	30.804	1.00	0.00
	ATOM	1070	HH22	ARG	929	7.688	22.652	31.955	1.00	0.00
30	ATOM	1071	C	ARG	929	3.617	28.948	32.343	1.00	19.75
	ATOM	1072	O	ARG	929	2.399	28.845	32.352	1.00	22.13
	ATOM	1073	N	SER	930	4.233	29.643	33.302	1.00	19.18
	ATOM	1074	H	SER	930	5.210	29.597	33.337	1.00	0.00
	ATOM	1075	CA	SER	930	3.516	30.450	34.297	1.00	17.14
35	ATOM	1076	CB	SER	930	4.368	30.611	35.573	1.00	17.28
	ATOM	1077	OG	SER	930	5.396	31.558	35.356	1.00	15.44
	ATOM	1078	HG	SER	930	5.998	31.536	36.103	1.00	0.00
	ATOM	1079	C	SER	930	3.180	31.828	33.760	1.00	16.63
	ATOM	1080	O	SER	930	2.441	32.546	34.424	1.00	16.64
40	ATOM	1081	N	LYS	931	3.678	32.262	32.579	1.00	16.58
	ATOM	1082	H	LYS	931	4.294	31.661	32.120	1.00	0.00
	ATOM	1083	CA	LYS	931	3.399	33.597	31.969	1.00	17.18
	ATOM	1084	CB	LYS	931	4.715	34.194	31.452	1.00	16.65
	ATOM	1085	CG	LYS	931	5.755	34.459	32.559	1.00	18.37
45	ATOM	1086	CD	LYS	931	5.072	34.948	33.845	1.00	20.53
	ATOM	1087	CE	LYS	931	5.533	36.283	34.406	1.00	27.38
	ATOM	1088	NZ	LYS	931	5.326	37.459	33.569	1.00	21.37
	ATOM	1089	HZ1	LYS	931	4.341	37.453	33.233	1.00	0.00
	ATOM	1090	HZ2	LYS	931	5.973	37.438	32.756	1.00	0.00
50	ATOM	1091	HZ3	LYS	931	5.487	38.318	34.135	1.00	0.00
	ATOM	1092	C	LYS	931	2.342	33.679	30.832	1.00	18.17
	ATOM	1093	O	LYS	931	2.078	34.713	30.219	1.00	17.81
	ATOM	1094	N	ARG	932	1.598	32.613	30.519	1.00	19.80
	ATOM	1095	H	ARG	932	1.725	31.788	31.036	1.00	0.00
55	ATOM	1096	CA	ARG	932	0.530	32.649	29.447	1.00	19.95
	ATOM	1097	CB	ARG	932	-0.223	31.255	29.441	1.00	17.89
	ATOM	1098	CG	ARG	932	0.708	30.061	29.192	1.00	16.96
	ATOM	1099	CD	ARG	932	0.935	29.804	27.715	1.00	13.47
	ATOM	1100	NE	ARG	932	1.815	28.653	27.598	1.00	12.87
60	ATOM	1101	HE	ARG	932	2.779	28.794	27.680	1.00	0.00
	ATOM	1102	CZ	ARG	932	1.350	27.409	27.382	1.00	17.01
	ATOM	1103	NH1	ARG	932	2.191	26.390	27.258	1.00	13.67

	ATOM	1104	HH11	ARG	932	3.175	26.549	27.332	1.00	0.00
	ATOM	1105	HH12	ARG	932	1.843	25.469	27.085	1.00	0.00
	ATOM	1106	NH2	ARG	932	0.047	27.112	27.245	1.00	19.64
	ATOM	1107	HH21	ARG	932	-0.634	27.843	27.299	1.00	0.00
5	ATOM	1108	HH22	ARG	932	-0.243	26.172	27.075	1.00	0.00
	ATOM	1109	C	ARG	932	-0.508	33.817	29.651	1.00	18.00
	ATOM	1110	O	ARG	932	-0.992	34.449	28.736	1.00	16.73
	ATOM	1111	N	ASN	933	-0.932	34.093	30.875	1.00	18.81
	ATOM	1112	H	ASN	933	-0.606	33.495	31.592	1.00	0.00
10	ATOM	1113	CA	ASN	933	-1.885	35.185	31.143	1.00	20.57
	ATOM	1114	CB	ASN	933	-2.764	34.760	32.338	1.00	21.86
	ATOM	1115	CG	ASN	933	-4.041	35.597	32.460	1.00	25.01
	ATOM	1116	OD1	ASN	933	-4.730	35.909	31.498	1.00	24.61
	ATOM	1117	ND2	ASN	933	-4.508	35.912	33.640	1.00	26.58
15	ATOM	1118	HD21	ASN	933	-4.115	35.691	34.499	1.00	0.00
	ATOM	1119	HD22	ASN	933	-5.320	36.438	33.627	1.00	0.00
	ATOM	1120	C	ASN	933	-1.145	36.500	31.427	1.00	21.84
	ATOM	1121	O	ASN	933	-1.734	37.454	31.956	1.00	20.90
	ATOM	1122	N	GLU	934	0.165	36.542	31.083	1.00	20.33
20	ATOM	1123	H	GLU	934	0.531	35.747	30.642	1.00	0.00
	ATOM	1124	CA	GLU	934	1.026	37.715	31.281	1.00	18.56
	ATOM	1125	CB	GLU	934	1.798	37.567	32.524	1.00	19.93
	ATOM	1126	CG	GLU	934	0.912	37.627	33.705	1.00	23.62
	ATOM	1127	CD	GLU	934	1.633	37.136	34.950	1.00	29.00
25	ATOM	1128	OE1	GLU	934	0.960	36.521	35.759	1.00	35.09
	ATOM	1129	OE2	GLU	934	2.816	37.348	35.163	1.00	29.49
	ATOM	1130	C	GLU	934	2.014	37.875	30.161	1.00	18.60
	ATOM	1131	O	GLU	934	3.208	38.127	30.366	1.00	18.66
	ATOM	1132	N	PHE	935	1.476	37.767	28.958	1.00	15.95
30	ATOM	1133	H	PHE	935	0.510	37.621	28.898	1.00	0.00
	ATOM	1134	CA	PHE	935	2.231	37.906	27.720	1.00	17.34
	ATOM	1135	CB	PHE	935	2.562	36.511	27.103	1.00	18.67
	ATOM	1136	CG	PHE	935	3.208	36.571	25.748	1.00	17.20
	ATOM	1137	CD1	PHE	935	2.430	36.619	24.577	1.00	17.74
35	ATOM	1138	CD2	PHE	935	4.595	36.619	25.655	1.00	15.38
	ATOM	1139	CE1	PHE	935	3.072	36.708	23.340	1.00	17.84
	ATOM	1140	CE2	PHE	935	5.250	36.704	24.442	1.00	13.41
	ATOM	1141	CZ	PHE	935	4.495	36.751	23.275	1.00	17.93
	ATOM	1142	C	PHE	935	1.466	38.715	26.695	1.00	18.59
40	ATOM	1143	O	PHE	935	0.260	38.622	26.606	1.00	21.65
	ATOM	1144	N	VAL	936	2.171	39.492	25.915	1.00	21.37
	ATOM	1145	H	VAL	936	3.135	39.546	26.112	1.00	0.00
	ATOM	1146	CA	VAL	936	1.642	40.343	24.839	1.00	24.92
	ATOM	1147	CB	VAL	936	1.411	41.836	25.218	1.00	28.41
45	ATOM	1148	CG1	VAL	936	0.048	41.900	25.771	1.00	30.85
	ATOM	1149	CG2	VAL	936	2.379	42.420	26.284	1.00	30.52
	ATOM	1150	C	VAL	936	2.727	40.391	23.789	1.00	24.98
	ATOM	1151	O	VAL	936	3.902	40.488	24.141	1.00	23.60
	ATOM	1152	N	PRO	937	2.391	40.305	22.499	1.00	27.34
50	ATOM	1153	CD	PRO	937	1.068	40.308	21.903	1.00	27.39
	ATOM	1154	CA	PRO	937	3.436	40.202	21.464	1.00	29.07
	ATOM	1155	CB	PRO	937	2.751	40.029	20.120	1.00	27.78
	ATOM	1156	CG	PRO	937	1.395	39.532	20.598	1.00	29.75
	ATOM	1157	C	PRO	937	4.289	41.441	21.477	1.00	31.82
55	ATOM	1158	O	PRO	937	5.513	41.363	21.369	1.00	33.35
	ATOM	1159	N	TYR	938	3.624	42.572	21.611	1.00	33.92
	ATOM	1160	H	TYR	938	2.664	42.574	21.765	1.00	0.00
	ATOM	1161	CA	TYR	938	4.254	43.902	21.670	1.00	38.16
	ATOM	1162	CB	TYR	938	3.940	44.812	20.454	1.00	38.30
60	ATOM	1163	C	TYR	938	3.598	44.565	22.849	1.00	42.36
	ATOM	1164	O	TYR	938	2.358	44.421	23.019	1.00	42.50
	ATOM	1166	CB	ASP	998	6.690	42.019	35.547	1.00	39.13



	ATOM	1167	C	ASP	998	5.334	41.514	33.465	1.00	35.64
	ATOM	1168	O	ASP	998	5.385	40.318	33.719	1.00	35.92
	ATOM	1169	HT1	ASP	998	3.964	41.725	35.584	1.00	0.00
	ATOM	1170	HT2	ASP	998	3.576	43.213	34.861	1.00	0.00
5	ATOM	1171	N	ASP	998	4.311	42.689	35.376	1.00	39.83
	ATOM	1172	HT3	ASP	998	4.509	43.156	36.286	1.00	0.00
	ATOM	1173	CA	ASP	998	5.571	42.536	34.595	1.00	36.70
	ATOM	1174	N	PHE	999	4.818	41.967	32.321	1.00	32.22
	ATOM	1175	H	PHE	999	4.713	42.926	32.164	1.00	0.00
10	ATOM	1176	CA	PHE	999	4.516	41.089	31.177	1.00	28.20
	ATOM	1177	CB	PHE	999	3.520	41.824	30.290	1.00	28.55
	ATOM	1178	CG	PHE	999	2.131	41.527	30.619	1.00	30.84
	ATOM	1179	CD1	PHE	999	1.267	41.319	29.530	1.00	32.04
	ATOM	1180	CD2	PHE	999	1.665	41.464	31.945	1.00	30.83
15	ATOM	1181	CE1	PHE	999	-0.092	41.032	29.756	1.00	32.75
	ATOM	1182	CE2	PHE	999	0.319	41.181	32.209	1.00	32.88
	ATOM	1183	CZ	PHE	999	-0.549	40.980	31.096	1.00	35.12
	ATOM	1184	C	PHE	999	5.665	40.616	30.292	1.00	26.86
	ATOM	1185	O	PHE	999	6.642	41.342	30.101	1.00	27.99
20	ATOM	1186	N	LEU	1000	5.593	39.419	29.754	1.00	21.61
	ATOM	1187	H	LEU	1000	4.849	38.831	29.983	1.00	0.00
	ATOM	1188	CA	LEU	1000	6.599	38.982	28.812	1.00	18.46
	ATOM	1189	CB	LEU	1000	6.674	37.443	28.675	1.00	19.96
	ATOM	1190	CG	LEU	1000	7.453	36.675	29.673	1.00	19.93
25	ATOM	1191	CD1	LEU	1000	7.219	35.218	29.387	1.00	19.55
	ATOM	1192	CD2	LEU	1000	8.948	37.049	29.604	1.00	20.60
	ATOM	1193	C	LEU	1000	6.112	39.509	27.482	1.00	16.99
	ATOM	1194	O	LEU	1000	4.905	39.629	27.243	1.00	13.80
	ATOM	1195	N	THR	1001	7.008	39.681	26.556	1.00	16.35
30	ATOM	1196	H	THR	1001	7.937	39.473	26.751	1.00	0.00
	ATOM	1197	CA	THR	1001	6.626	40.141	25.225	1.00	18.34
	ATOM	1198	CB	THR	1001	6.887	41.659	25.020	1.00	17.93
	ATOM	1199	OG1	THR	1001	8.284	41.853	25.098	1.00	19.57
	ATOM	1200	HG1	THR	1001	8.285	42.805	25.279	1.00	0.00
35	ATOM	1201	CG2	THR	1001	6.238	42.556	26.046	1.00	15.57
	ATOM	1202	C	THR	1001	7.451	39.383	24.206	1.00	18.91
	ATOM	1203	O	THR	1001	8.369	38.610	24.559	1.00	20.39
	ATOM	1204	N	LEU	1002	7.192	39.522	22.926	1.00	18.00
	ATOM	1205	H	LEU	1002	6.461	40.121	22.641	1.00	0.00
40	ATOM	1206	CA	LEU	1002	8.001	38.828	21.909	1.00	20.19
	ATOM	1207	CB	LEU	1002	7.425	39.207	20.586	1.00	21.63
	ATOM	1208	CG	LEU	1002	7.765	38.418	19.406	1.00	21.84
	ATOM	1209	CD1	LEU	1002	7.796	36.870	19.558	1.00	20.92
	ATOM	1210	CD2	LEU	1002	6.632	38.894	18.488	1.00	23.46
45	ATOM	1211	C	LEU	1002	9.493	39.230	21.992	1.00	20.92
	ATOM	1212	O	LEU	1002	10.433	38.445	21.770	1.00	21.44
	ATOM	1213	N	GLU	1003	9.749	40.501	22.309	1.00	18.64
	ATOM	1214	H	GLU	1003	8.975	41.111	22.335	1.00	0.00
	ATOM	1215	CA	GLU	1003	11.134	40.936	22.454	1.00	17.74
50	ATOM	1216	CB	GLU	1003	11.116	42.306	22.962	1.00	19.96
	ATOM	1217	CG	GLU	1003	12.490	42.843	22.601	1.00	23.83
	ATOM	1218	CD	GLU	1003	12.703	44.253	23.128	1.00	25.93
	ATOM	1219	OE1	GLU	1003	11.772	44.928	23.590	1.00	25.96
	ATOM	1220	OE2	GLU	1003	13.854	44.671	23.056	1.00	31.50
55	ATOM	1221	C	GLU	1003	11.869	40.036	23.476	1.00	17.42
	ATOM	1222	O	GLU	1003	12.975	39.573	23.242	1.00	17.96
	ATOM	1223	N	HIS	1004	11.317	39.838	24.672	1.00	16.27
	ATOM	1224	H	HIS	1004	10.439	40.256	24.840	1.00	0.00
	ATOM	1225	CA	HIS	1004	11.913	38.946	25.719	1.00	16.06
60	ATOM	1226	C	HIS	1004	12.223	37.575	25.149	1.00	14.81
	ATOM	1227	O	HIS	1004	13.287	37.036	25.390	1.00	14.88
	ATOM	1228	CB	HIS	1004	10.949	38.674	26.839	1.00	16.28

	ATOM	1229	CG	HIS	1004	10.641	39.870	27.605	1.00	17.20
	ATOM	1230	ND1	HIS	1004	11.229	40.191	28.774	1.00	20.53
	ATOM	1231	HD1	HIS	1004	11.826	39.626	29.313	1.00	0.00
	ATOM	1232	CD2	HIS	1004	9.707	40.834	27.316	1.00	18.39
5	ATOM	1233	NE2	HIS	1004	9.704	41.720	28.329	1.00	20.89
	ATOM	1234	CE1	HIS	1004	10.645	41.341	29.237	1.00	17.00
	ATOM	1235	N	LEU	1005	11.235	36.987	24.443	1.00	14.93
	ATOM	1236	H	LEU	1005	10.384	37.470	24.377	1.00	0.00
	ATOM	1237	CA	LEU	1005	11.336	35.651	23.802	1.00	14.44
10	ATOM	1238	CB	LEU	1005	9.988	35.363	23.107	1.00	13.30
	ATOM	1239	CG	LEU	1005	8.897	34.601	23.906	1.00	16.10
	ATOM	1240	CD1	LEU	1005	8.900	34.972	25.369	1.00	16.97
	ATOM	1241	CD2	LEU	1005	7.612	34.699	23.098	1.00	13.85
	ATOM	1242	C	LEU	1005	12.485	35.583	22.829	1.00	15.62
15	ATOM	1243	O	LEU	1005	13.300	34.635	22.865	1.00	14.77
	ATOM	1244	N	ILE	1006	12.580	36.561	21.915	1.00	13.68
	ATOM	1245	H	ILE	1006	11.866	37.230	21.875	1.00	0.00
	ATOM	1246	CA	ILE	1006	13.728	36.602	20.969	1.00	14.26
	ATOM	1247	CB	ILE	1006	13.583	37.714	19.895	1.00	14.47
20	ATOM	1248	CG2	ILE	1006	14.833	37.712	18.933	1.00	12.35
	ATOM	1249	CG1	ILE	1006	12.209	37.500	19.216	1.00	18.77
	ATOM	1250	CD1	ILE	1006	11.753	38.601	18.210	1.00	19.53
	ATOM	1251	C	ILE	1006	15.044	36.880	21.750	1.00	13.38
	ATOM	1252	O	ILE	1006	16.106	36.341	21.454	1.00	14.54
25	ATOM	1253	N	CYS	1007	14.999	37.753	22.744	1.00	11.90
	ATOM	1254	H	CYS	1007	14.134	38.172	22.918	1.00	0.00
	ATOM	1255	CA	CYS	1007	16.173	38.057	23.549	1.00	12.20
	ATOM	1256	CB	CYS	1007	15.806	39.138	24.592	1.00	13.44
	ATOM	1257	SG	CYS	1007	17.313	39.600	25.503	1.00	19.83
30	ATOM	1258	C	CYS	1007	16.728	36.769	24.261	1.00	14.29
	ATOM	1259	O	CYS	1007	17.941	36.438	24.211	1.00	12.19
	ATOM	1260	N	TYR	1008	15.843	36.003	24.940	1.00	11.40
	ATOM	1261	H	TYR	1008	14.903	36.256	24.969	1.00	0.00
	ATOM	1262	CA	TYR	1008	16.303	34.775	25.615	1.00	12.66
35	ATOM	1263	CB	TYR	1008	15.126	34.121	26.302	1.00	11.34
	ATOM	1264	CG	TYR	1008	14.416	34.903	27.341	1.00	13.82
	ATOM	1265	CD1	TYR	1008	13.060	34.568	27.574	1.00	12.39
	ATOM	1266	CE1	TYR	1008	12.327	35.232	28.582	1.00	12.54
	ATOM	1267	CD2	TYR	1008	15.039	35.910	28.139	1.00	15.02
40	ATOM	1268	CE2	TYR	1008	14.315	36.583	29.149	1.00	14.94
	ATOM	1269	CZ	TYR	1008	12.971	36.222	29.352	1.00	15.49
	ATOM	1270	OH	TYR	1008	12.251	36.850	30.320	1.00	16.38
	ATOM	1271	HH	TYR	1008	11.368	36.485	30.351	1.00	0.00
	ATOM	1272	C	TYR	1008	16.929	33.778	24.595	1.00	12.04
45	ATOM	1273	O	TYR	1008	17.971	33.130	24.812	1.00	11.06
	ATOM	1274	N	SER	1009	16.267	33.697	23.414	1.00	11.13
	ATOM	1275	H	SER	1009	15.406	34.160	23.306	1.00	0.00
	ATOM	1276	CA	SER	1009	16.731	32.832	22.340	1.00	12.56
	ATOM	1277	CB	SER	1009	15.805	32.956	21.091	1.00	13.07
50	ATOM	1278	OG	SER	1009	14.457	32.579	21.394	1.00	11.97
	ATOM	1279	HG	SER	1009	13.922	32.692	20.606	1.00	0.00
	ATOM	1280	C	SER	1009	18.136	33.205	21.917	1.00	11.19
	ATOM	1281	O	SER	1009	19.011	32.370	21.732	1.00	12.15
	ATOM	1282	N	PHE	1010	18.380	34.474	21.626	1.00	12.64
55	ATOM	1283	H	PHE	1010	17.629	35.105	21.669	1.00	0.00
	ATOM	1284	CA	PHE	1010	19.735	34.989	21.224	1.00	13.28
	ATOM	1285	CB	PHE	1010	19.579	36.546	20.882	1.00	15.81
	ATOM	1286	CG	PHE	1010	20.859	37.347	20.823	1.00	13.63
	ATOM	1287	CD1	PHE	1010	21.234	38.189	21.894	1.00	14.37
60	ATOM	1288	CD2	PHE	1010	21.699	37.246	19.706	1.00	13.09
	ATOM	1289	CE1	PHE	1010	22.439	38.918	21.850	1.00	13.98
	ATOM	1290	CE2	PHE	1010	22.911	37.979	19.654	1.00	13.81

	ATOM	1291	CZ	PHE	1010	23.267	38.812	20.734	1.00	13.96
	ATOM	1292	C	PHE	1010	20.794	34.720	22.380	1.00	12.60
	ATOM	1293	O	PHE	1010	21.936	34.298	22.152	1.00	12.76
	ATOM	1294	N	GLN	1011	20.436	35.009	23.647	1.00	12.89
5	ATOM	1295	H	GLN	1011	19.561	35.418	23.783	1.00	0.00
	ATOM	1296	CA	GLN	1011	21.324	34.734	24.784	1.00	11.62
	ATOM	1297	CB	GLN	1011	20.656	35.163	26.041	1.00	10.75
	ATOM	1298	CG	GLN	1011	20.592	36.674	26.214	1.00	11.35
	ATOM	1299	CD	GLN	1011	20.036	36.897	27.629	1.00	15.30
10	ATOM	1300	OE1	GLN	1011	20.711	36.668	28.641	1.00	11.72
	ATOM	1301	NE2	GLN	1011	18.762	37.324	27.747	1.00	13.24
	ATOM	1302	HE21	GLN	1011	18.204	37.489	26.968	1.00	0.00
	ATOM	1303	HE22	GLN	1011	18.407	37.473	28.644	1.00	0.00
	ATOM	1304	C	GLN	1011	21.663	33.243	24.874	1.00	12.50
15	ATOM	1305	O	GLN	1011	22.828	32.883	25.099	1.00	14.54
	ATOM	1306	N	VAL	1012	20.712	32.309	24.694	1.00	11.33
	ATOM	1307	H	VAL	1012	19.785	32.575	24.556	1.00	0.00
	ATOM	1308	CA	VAL	1012	21.112	30.903	24.777	1.00	11.64
	ATOM	1309	CB	VAL	1012	19.871	29.985	24.807	1.00	11.09
20	ATOM	1310	CG1	VAL	1012	20.383	28.530	24.771	1.00	12.97
	ATOM	1311	CG2	VAL	1012	19.011	30.254	26.055	1.00	7.98
	ATOM	1312	C	VAL	1012	22.015	30.585	23.590	1.00	11.05
	ATOM	1313	O	VAL	1012	23.011	29.865	23.722	1.00	11.67
	ATOM	1314	N	ALA	1013	21.769	31.167	22.409	1.00	11.56
25	ATOM	1315	H	ALA	1013	20.977	31.745	22.321	1.00	0.00
	ATOM	1316	CA	ALA	1013	22.648	30.926	21.233	1.00	11.59
	ATOM	1317	CB	ALA	1013	22.072	31.584	19.978	1.00	11.37
	ATOM	1318	C	ALA	1013	24.042	31.499	21.516	1.00	11.25
	ATOM	1319	O	ALA	1013	25.073	30.917	21.153	1.00	12.88
30	ATOM	1320	N	LYS	1014	24.131	32.637	22.203	1.00	13.06
	ATOM	1321	H	LYS	1014	23.307	33.090	22.468	1.00	0.00
	ATOM	1322	CA	LYS	1014	25.459	33.218	22.594	1.00	12.82
	ATOM	1323	CB	LYS	1014	25.280	34.594	23.289	1.00	13.37
	ATOM	1324	CG	LYS	1014	24.908	35.665	22.309	1.00	14.80
35	ATOM	1325	CD	LYS	1014	26.140	36.101	21.537	1.00	18.01
	ATOM	1326	CE	LYS	1014	26.723	37.350	22.217	1.00	21.41
	ATOM	1327	NZ	LYS	1014	27.893	37.817	21.449	1.00	18.85
	ATOM	1328	HZ1	LYS	1014	27.645	37.866	20.440	1.00	0.00
	ATOM	1329	HZ2	LYS	1014	28.680	37.149	21.570	1.00	0.00
40	ATOM	1330	HZ3	LYS	1014	28.175	38.758	21.787	1.00	0.00
	ATOM	1331	C	LYS	1014	26.191	32.263	23.583	1.00	12.28
	ATOM	1332	O	LYS	1014	27.381	31.949	23.449	1.00	11.19
	ATOM	1333	N	GLY	1015	25.477	31.754	24.597	1.00	13.00
	ATOM	1334	H	GLY	1015	24.551	32.056	24.713	1.00	0.00
45	ATOM	1335	CA	GLY	1015	26.102	30.801	25.582	1.00	11.46
	ATOM	1336	C	GLY	1015	26.558	29.517	24.882	1.00	11.28
	ATOM	1337	O	GLY	1015	27.597	28.977	25.184	1.00	8.45
	ATOM	1338	N	MET	1016	25.765	28.965	23.951	1.00	10.94
	ATOM	1339	H	MET	1016	24.883	29.370	23.824	1.00	0.00
50	ATOM	1340	CA	MET	1016	26.139	27.742	23.224	1.00	10.73
	ATOM	1341	CB	MET	1016	24.874	27.219	22.543	1.00	10.81
	ATOM	1342	CG	MET	1016	23.763	26.627	23.416	1.00	7.81
	ATOM	1343	SD	MET	1016	24.457	25.258	24.365	1.00	14.59
	ATOM	1344	CE	MET	1016	25.290	24.149	23.229	1.00	14.27
55	ATOM	1345	C	MET	1016	27.301	27.993	22.215	1.00	12.12
	ATOM	1346	O	MET	1016	28.153	27.136	21.955	1.00	11.52
	ATOM	1347	N	GLU	1017	27.353	29.172	21.574	1.00	12.11
	ATOM	1348	H	GLU	1017	26.589	29.779	21.658	1.00	0.00
	ATOM	1349	CA	GLU	1017	28.479	29.517	20.721	1.00	12.02
60	ATOM	1350	CB	GLU	1017	28.165	30.883	20.122	1.00	12.90
	ATOM	1351	CG	GLU	1017	29.413	31.367	19.410	1.00	14.75
	ATOM	1352	CD	GLU	1017	29.238	32.772	18.847	1.00	19.04

	ATOM	1353	OE1	GLU	1017	28.894	33.684	19.643	1.00	17.11
	ATOM	1354	OE2	GLU	1017	29.516	32.940	17.650	1.00	17.41
	ATOM	1355	C	GLU	1017	29.718	29.521	21.630	1.00	12.67
	ATOM	1356	O	GLU	1017	30.797	29.096	21.236	1.00	14.11
5	ATOM	1357	N	PHE	1018	29.619	30.040	22.866	1.00	13.88
	ATOM	1358	H	PHE	1018	28.769	30.457	23.123	1.00	0.00
	ATOM	1359	CA	PHE	1018	30.719	30.047	23.812	1.00	12.32
	ATOM	1360	CB	PHE	1018	30.303	30.798	25.041	1.00	11.54
	ATOM	1361	CG	PHE	1018	31.356	30.699	26.113	1.00	14.88
10	ATOM	1362	CD1	PHE	1018	31.155	29.894	27.258	1.00	15.65
	ATOM	1363	CD2	PHE	1018	32.548	31.448	26.018	1.00	18.92
	ATOM	1364	CE1	PHE	1018	32.103	29.838	28.283	1.00	16.49
	ATOM	1365	CE2	PHE	1018	33.509	31.390	27.060	1.00	18.86
	ATOM	1366	CZ	PHE	1018	33.278	30.589	28.180	1.00	16.01
15	ATOM	1367	C	PHE	1018	31.058	28.610	24.164	1.00	15.23
	ATOM	1368	O	PHE	1018	32.223	28.179	24.094	1.00	16.64
	ATOM	1369	N	LEU	1019	30.077	27.763	24.511	1.00	15.97
	ATOM	1370	H	LEU	1019	29.157	28.089	24.600	1.00	0.00
	ATOM	1371	CA	LEU	1019	30.403	26.366	24.832	1.00	14.65
20	ATOM	1372	CB	LEU	1019	29.141	25.512	25.011	1.00	18.20
	ATOM	1373	CG	LEU	1019	28.647	25.390	26.419	1.00	26.16
	ATOM	1374	CD1	LEU	1019	27.419	24.450	26.480	1.00	26.09
	ATOM	1375	CD2	LEU	1019	29.799	24.819	27.256	1.00	26.37
	ATOM	1376	C	LEU	1019	31.211	25.720	23.720	1.00	14.84
25	ATOM	1377	O	LEU	1019	32.226	25.066	23.953	1.00	14.62
	ATOM	1378	N	ALA	1020	30.739	25.870	22.479	1.00	13.50
	ATOM	1379	H	ALA	1020	29.910	26.382	22.364	1.00	0.00
	ATOM	1380	CA	ALA	1020	31.386	25.272	21.295	1.00	15.91
	ATOM	1381	CB	ALA	1020	30.519	25.509	19.974	1.00	11.47
30	ATOM	1382	C	ALA	1020	32.810	25.827	21.113	1.00	15.57
	ATOM	1383	O	ALA	1020	33.708	25.079	20.658	1.00	16.40
	ATOM	1384	N	SER	1021	33.022	27.097	21.478	1.00	14.16
	ATOM	1385	H	SER	1021	32.285	27.641	21.832	1.00	0.00
	ATOM	1386	CA	SER	1021	34.396	27.669	21.378	1.00	15.64
35	ATOM	1387	CB	SER	1021	34.382	29.185	21.609	1.00	12.50
	ATOM	1388	OG	SER	1021	34.231	29.564	22.960	1.00	15.14
	ATOM	1389	HG	SER	1021	34.432	30.497	23.042	1.00	0.00
	ATOM	1390	C	SER	1021	35.376	26.999	22.377	1.00	18.10
	ATOM	1391	O	SER	1021	36.601	27.028	22.206	1.00	18.25
40	ATOM	1392	N	ARG	1022	34.853	26.403	23.471	1.00	17.77
	ATOM	1393	H	ARG	1022	33.894	26.560	23.634	1.00	0.00
	ATOM	1394	CA	ARG	1022	35.667	25.662	24.493	1.00	18.79
	ATOM	1395	CB	ARG	1022	35.040	25.793	25.893	1.00	16.78
	ATOM	1396	CG	ARG	1022	34.776	27.271	26.151	1.00	15.45
45	ATOM	1397	CD	ARG	1022	35.793	27.876	27.037	1.00	22.99
	ATOM	1398	NE	ARG	1022	36.998	28.059	26.353	1.00	23.94
	ATOM	1399	HE	ARG	1022	36.946	28.482	25.471	1.00	0.00
	ATOM	1400	CZ	ARG	1022	38.212	27.712	26.762	1.00	27.81
	ATOM	1401	NH1	ARG	1022	39.183	27.999	25.923	1.00	31.74
50	ATOM	1402	HH11	ARG	1022	38.974	28.439	25.049	1.00	0.00
	ATOM	1403	HH12	ARG	1022	40.131	27.770	26.149	1.00	0.00
	ATOM	1404	NH2	ARG	1022	38.604	27.067	27.850	1.00	27.41
	ATOM	1405	HH21	ARG	1022	37.927	26.766	28.513	1.00	0.00
	ATOM	1406	HH22	ARG	1022	39.578	26.896	28.010	1.00	0.00
55	ATOM	1407	C	ARG	1022	35.753	24.182	24.147	1.00	19.64
	ATOM	1408	O	ARG	1022	36.071	23.336	24.978	1.00	19.39
	ATOM	1409	N	LYS	1023	35.275	23.865	22.937	1.00	22.30
	ATOM	1410	H	LYS	1023	35.017	24.626	22.381	1.00	0.00
	ATOM	1411	CA	LYS	1023	35.171	22.556	22.307	1.00	23.56
60	ATOM	1412	CB	LYS	1023	36.579	21.970	22.060	1.00	29.00
	ATOM	1413	CG	LYS	1023	37.388	22.898	21.206	1.00	33.55
	ATOM	1414	CD	LYS	1023	38.796	22.334	21.049	1.00	40.54

	ATOM	1415	CE	LYS	1023	39.841	23.432	20.610	1.00	43.78
	ATOM	1416	NZ	LYS	1023	39.356	24.159	19.409	1.00	47.46
	ATOM	1417	HZ1	LYS	1023	38.356	24.403	19.557	1.00	0.00
	ATOM	1418	HZ2	LYS	1023	39.426	23.520	18.591	1.00	0.00
5	ATOM	1419	HZ3	LYS	1023	39.902	25.027	19.237	1.00	0.00
	ATOM	1420	C	LYS	1023	34.365	21.598	23.187	1.00	24.84
	ATOM	1421	O	LYS	1023	34.690	20.413	23.376	1.00	23.68
	ATOM	1422	N	CYS	1024	33.264	22.101	23.752	1.00	21.28
	ATOM	1423	H	CYS	1024	33.082	23.059	23.647	1.00	0.00
10	ATOM	1424	CA	CYS	1024	32.420	21.254	24.582	1.00	18.79
	ATOM	1425	CB	CYS	1024	32.309	21.888	26.003	1.00	19.38
	ATOM	1426	SG	CYS	1024	33.850	21.728	26.983	1.00	21.65
	ATOM	1427	C	CYS	1024	31.041	21.078	23.961	1.00	19.89
	ATOM	1428	O	CYS	1024	30.653	21.890	23.123	1.00	21.64
15	ATOM	1429	N	ILE	1025	30.282	20.015	24.245	1.00	18.76
	ATOM	1430	H	ILE	1025	30.637	19.263	24.754	1.00	0.00
	ATOM	1431	CA	ILE	1025	28.911	19.952	23.709	1.00	18.28
	ATOM	1432	CB	ILE	1025	28.739	18.845	22.634	1.00	19.24
	ATOM	1433	CG2	ILE	1025	29.973	18.821	21.672	1.00	22.05
20	ATOM	1434	CG1	ILE	1025	28.577	17.535	23.240	1.00	21.22
	ATOM	1435	CD1	ILE	1025	28.430	16.570	22.033	1.00	26.22
	ATOM	1436	C	ILE	1025	28.011	19.703	24.943	1.00	18.37
	ATOM	1437	O	ILE	1025	28.441	19.172	25.982	1.00	17.58
	ATOM	1438	N	HIS	1026	26.796	20.177	24.926	1.00	14.11
25	ATOM	1439	H	HIS	1026	26.609	20.866	24.273	1.00	0.00
	ATOM	1440	CA	HIS	1026	25.905	20.034	26.082	1.00	13.85
	ATOM	1441	C	HIS	1026	25.315	18.666	26.284	1.00	15.23
	ATOM	1442	O	HIS	1026	25.410	18.129	27.377	1.00	14.64
	ATOM	1443	CB	HIS	1026	24.753	21.144	26.004	1.00	11.30
30	ATOM	1444	CG	HIS	1026	23.972	21.255	27.286	1.00	11.07
	ATOM	1445	ND1	HIS	1026	23.172	20.284	27.791	1.00	10.39
	ATOM	1446	CE1	HIS	1026	22.659	20.691	29.005	1.00	7.98
	ATOM	1447	CD2	HIS	1026	23.952	22.291	28.226	1.00	9.75
	ATOM	1448	NE2	HIS	1026	23.147	21.918	29.253	1.00	9.73
35	ATOM	1449	HE2	HIS	1026	22.898	22.465	30.034	1.00	0.00
	ATOM	1450	N	ARG	1027	24.775	18.066	25.217	1.00	14.54
	ATOM	1451	H	ARG	1027	24.925	18.520	24.374	1.00	0.00
	ATOM	1452	CA	ARG	1027	24.089	16.755	25.212	1.00	14.85
	ATOM	1453	CB	ARG	1027	24.927	15.621	25.851	1.00	15.44
40	ATOM	1454	CG	ARG	1027	26.249	15.529	25.042	1.00	17.78
	ATOM	1455	CD	ARG	1027	27.029	14.319	25.570	1.00	20.21
	ATOM	1456	NE	ARG	1027	28.310	14.219	24.858	1.00	22.17
	ATOM	1457	HE	ARG	1027	28.402	13.583	24.116	1.00	0.00
	ATOM	1458	CZ	ARG	1027	29.366	14.980	25.186	1.00	24.11
45	ATOM	1459	NH1	ARG	1027	30.455	14.797	24.470	1.00	24.72
	ATOM	1460	HH11	ARG	1027	30.486	14.131	23.725	1.00	0.00
	ATOM	1461	HH12	ARG	1027	31.261	15.349	24.678	1.00	0.00
	ATOM	1462	NH2	ARG	1027	29.386	15.945	26.124	1.00	19.73
	ATOM	1463	HH21	ARG	1027	28.546	16.136	26.625	1.00	0.00
50	ATOM	1464	HH22	ARG	1027	30.218	16.464	26.317	1.00	0.00
	ATOM	1465	C	ARG	1027	22.726	16.770	25.898	1.00	15.15
	ATOM	1466	O	ARG	1027	22.031	15.783	25.796	1.00	17.29
	ATOM	1467	N	ASP	1028	22.247	17.819	26.563	1.00	12.98
	ATOM	1468	H	ASP	1028	22.827	18.590	26.700	1.00	0.00
55	ATOM	1469	CA	ASP	1028	20.867	17.808	27.114	1.00	13.81
	ATOM	1470	CB	ASP	1028	20.884	17.239	28.554	1.00	10.92
	ATOM	1471	CG	ASP	1028	19.477	16.877	29.059	1.00	13.90
	ATOM	1472	OD1	ASP	1028	19.368	16.564	30.237	1.00	14.72
	ATOM	1473	OD2	ASP	1028	18.467	16.903	28.340	1.00	14.75
60	ATOM	1474	C	ASP	1028	20.277	19.236	27.109	1.00	12.93
	ATOM	1475	O	ASP	1028	19.652	19.740	28.076	1.00	12.95
	ATOM	1476	N	LEU	1029	20.471	19.899	25.962	1.00	10.36

	ATOM	1477	H	LEU	1029	20.866	19.426	25.211	1.00	0.00
	ATOM	1478	CA	LEU	1029	19.978	21.275	25.846	1.00	10.75
	ATOM	1479	CB	LEU	1029	20.691	21.949	24.622	1.00	9.18
	ATOM	1480	CG	LEU	1029	20.249	23.394	24.452	1.00	8.50
5	ATOM	1481	CD1	LEU	1029	20.725	24.349	25.604	1.00	10.27
	ATOM	1482	CD2	LEU	1029	20.921	23.888	23.172	1.00	8.31
	ATOM	1483	C	LEU	1029	18.469	21.209	25.721	1.00	10.44
	ATOM	1484	O	LEU	1029	17.932	20.471	24.901	1.00	10.44
	ATOM	1485	N	ALA	1030	17.781	21.945	26.570	1.00	11.50
10	ATOM	1486	H	ALA	1030	18.328	22.482	27.188	1.00	0.00
	ATOM	1487	CA	ALA	1030	16.300	22.007	26.690	1.00	11.94
	ATOM	1488	CB	ALA	1030	15.721	20.737	27.361	1.00	7.80
	ATOM	1489	C	ALA	1030	15.893	23.186	27.573	1.00	12.77
	ATOM	1490	O	ALA	1030	16.722	23.650	28.353	1.00	13.94
15	ATOM	1491	N	ALA	1031	14.647	23.695	27.536	1.00	13.10
	ATOM	1492	H	ALA	1031	13.984	23.240	26.991	1.00	0.00
	ATOM	1493	CA	ALA	1031	14.255	24.832	28.394	1.00	11.27
	ATOM	1494	CB	ALA	1031	12.788	25.302	28.123	1.00	10.90
	ATOM	1495	C	ALA	1031	14.371	24.442	29.884	1.00	11.50
20	ATOM	1496	O	ALA	1031	14.616	25.324	30.700	1.00	11.66
	ATOM	1497	N	ARG	1032	14.184	23.164	30.279	1.00	10.32
	ATOM	1498	H	ARG	1032	13.911	22.541	29.578	1.00	0.00
	ATOM	1499	CA	ARG	1032	14.329	22.714	31.699	1.00	10.89
	ATOM	1500	CB	ARG	1032	13.946	21.212	31.778	1.00	12.39
25	ATOM	1501	CG	ARG	1032	14.944	20.267	31.071	1.00	10.52
	ATOM	1502	CD	ARG	1032	14.915	18.691	31.274	1.00	15.19
	ATOM	1503	NE	ARG	1032	14.336	18.407	30.000	1.00	21.87
	ATOM	1504	HE	ARG	1032	13.410	18.732	29.967	1.00	0.00
	ATOM	1505	CZ	ARG	1032	14.695	17.844	28.869	1.00	16.89
30	ATOM	1506	NH1	ARG	1032	13.676	18.001	28.094	1.00	19.18
	ATOM	1507	HH11	ARG	1032	12.853	18.466	28.423	1.00	0.00
	ATOM	1508	HH12	ARG	1032	13.736	17.667	27.157	1.00	0.00
	ATOM	1509	NH2	ARG	1032	15.755	17.217	28.419	1.00	13.89
	ATOM	1510	HH21	ARG	1032	16.539	17.086	29.028	1.00	0.00
35	ATOM	1511	HH22	ARG	1032	15.784	16.885	27.477	1.00	0.00
	ATOM	1512	C	ARG	1032	15.782	22.956	32.172	1.00	11.51
	ATOM	1513	O	ARG	1032	16.069	23.058	33.365	1.00	11.18
	ATOM	1514	N	ASN	1033	16.744	22.998	31.211	1.00	10.80
	ATOM	1515	H	ASN	1033	16.463	22.885	30.284	1.00	0.00
40	ATOM	1516	CA	ASN	1033	18.174	23.261	31.484	1.00	10.46
	ATOM	1517	CB	ASN	1033	19.109	22.252	30.756	1.00	8.96
	ATOM	1518	CG	ASN	1033	19.150	20.947	31.549	1.00	10.56
	ATOM	1519	OD1	ASN	1033	19.015	20.893	32.786	1.00	12.17
	ATOM	1520	ND2	ASN	1033	19.322	19.830	30.901	1.00	7.00
45	ATOM	1521	HD21	ASN	1033	19.419	19.804	29.931	1.00	0.00
	ATOM	1522	HD22	ASN	1033	19.341	19.042	31.471	1.00	0.00
	ATOM	1523	C	ASN	1033	18.669	24.670	31.160	1.00	9.24
	ATOM	1524	O	ASN	1033	19.850	24.956	30.984	1.00	8.86
	ATOM	1525	N	ILE	1034	17.695	25.585	31.140	1.00	10.69
50	ATOM	1526	H	ILE	1034	16.779	25.300	31.325	1.00	0.00
	ATOM	1527	CA	ILE	1034	17.961	27.004	30.982	1.00	10.85
	ATOM	1528	CB	ILE	1034	17.295	27.638	29.712	1.00	8.94
	ATOM	1529	CG2	ILE	1034	17.653	29.209	29.750	1.00	10.33
	ATOM	1530	CG1	ILE	1034	17.777	26.914	28.410	1.00	5.96
55	ATOM	1531	CD1	ILE	1034	19.290	26.918	28.169	1.00	4.62
	ATOM	1532	C	ILE	1034	17.414	27.726	32.226	1.00	9.32
	ATOM	1533	O	ILE	1034	16.297	27.512	32.652	1.00	10.60
	ATOM	1534	N	LEU	1035	18.201	28.563	32.847	1.00	8.65
	ATOM	1535	H	LEU	1035	19.102	28.667	32.504	1.00	0.00
60	ATOM	1536	CA	LEU	1035	17.785	29.339	34.024	1.00	11.52
	ATOM	1537	CB	LEU	1035	18.889	29.174	35.128	1.00	12.44
	ATOM	1538	CG	LEU	1035	19.182	27.706	35.559	1.00	12.24

	ATOM	1539	CD1	LEU	1035	20.354	27.693	36.471	1.00	10.80
	ATOM	1540	CD2	LEU	1035	18.022	27.085	36.334	1.00	13.64
	ATOM	1541	C	LEU	1035	17.534	30.831	33.770	1.00	10.83
	ATOM	1542	O	LEU	1035	18.279	31.517	33.061	1.00	11.36
5	ATOM	1543	N	LEU	1036	16.541	31.395	34.410	1.00	9.61
	ATOM	1544	H	LEU	1036	15.952	30.840	34.958	1.00	0.00
	ATOM	1545	CA	LEU	1036	16.285	32.805	34.274	1.00	10.17
	ATOM	1546	CB	LEU	1036	14.766	33.089	34.021	1.00	11.69
	ATOM	1547	CG	LEU	1036	14.380	34.614	33.929	1.00	13.21
10	ATOM	1548	CD1	LEU	1036	15.085	35.316	32.733	1.00	9.68
	ATOM	1549	CD2	LEU	1036	12.847	34.715	33.885	1.00	11.77
	ATOM	1550	C	LEU	1036	16.717	33.497	35.579	1.00	12.75
	ATOM	1551	O	LEU	1036	16.341	33.186	36.731	1.00	12.74
	ATOM	1552	N	SER	1037	17.633	34.413	35.384	1.00	16.37
15	ATOM	1553	H	SER	1037	17.934	34.513	34.457	1.00	0.00
	ATOM	1554	CA	SER	1037	18.219	35.266	36.442	1.00	20.46
	ATOM	1555	CB	SER	1037	19.702	35.327	36.139	1.00	19.66
	ATOM	1556	OG	SER	1037	20.325	35.431	37.377	1.00	26.65
	ATOM	1557	HG	SER	1037	21.255	35.600	37.186	1.00	0.00
20	ATOM	1558	C	SER	1037	17.578	36.667	36.456	1.00	21.61
	ATOM	1559	O	SER	1037	16.579	36.921	35.754	1.00	21.40
	ATOM	1560	N	GLU	1038	18.079	37.644	37.232	1.00	23.42
	ATOM	1561	H	GLU	1038	18.829	37.434	37.822	1.00	0.00
	ATOM	1562	CA	GLU	1038	17.460	39.000	37.149	1.00	24.39
25	ATOM	1563	CB	GLU	1038	17.854	40.040	38.233	1.00	31.89
	ATOM	1564	CG	GLU	1038	18.306	39.579	39.622	1.00	43.42
	ATOM	1565	CD	GLU	1038	19.764	39.123	39.364	1.00	52.98
	ATOM	1566	OE1	GLU	1038	20.045	37.939	39.559	1.00	56.28
	ATOM	1567	OE2	GLU	1038	20.622	39.922	38.932	1.00	56.68
30	ATOM	1568	C	GLU	1038	17.880	39.706	35.869	1.00	22.37
	ATOM	1569	O	GLU	1038	18.707	39.261	35.100	1.00	20.62
	ATOM	1570	N	LYS	1039	17.267	40.804	35.558	1.00	22.33
	ATOM	1571	H	LYS	1039	16.570	41.075	36.171	1.00	0.00
	ATOM	1572	CA	LYS	1039	17.553	41.632	34.383	1.00	23.32
35	ATOM	1573	CB	LYS	1039	18.946	42.312	34.567	1.00	26.92
	ATOM	1574	CG	LYS	1039	18.992	43.228	35.836	1.00	33.27
	ATOM	1575	CD	LYS	1039	18.257	44.620	35.807	1.00	42.10
	ATOM	1576	CE	LYS	1039	16.876	44.879	35.048	1.00	48.53
	ATOM	1577	NZ	LYS	1039	17.021	45.062	33.562	1.00	52.83
40	ATOM	1578	HZ1	LYS	1039	17.633	44.307	33.185	1.00	0.00
	ATOM	1579	HZ2	LYS	1039	17.447	45.983	33.332	1.00	0.00
	ATOM	1580	HZ3	LYS	1039	16.093	44.982	33.096	1.00	0.00
	ATOM	1581	C	LYS	1039	17.486	40.912	33.092	1.00	20.89
	ATOM	1582	O	LYS	1039	18.137	41.252	32.118	1.00	20.20
45	ATOM	1583	N	ASN	1040	16.573	39.967	33.045	1.00	21.23
	ATOM	1584	H	ASN	1040	16.029	39.858	33.848	1.00	0.00
	ATOM	1585	CA	ASN	1040	16.285	39.082	31.864	1.00	19.61
	ATOM	1586	CB	ASN	1040	15.583	39.883	30.712	1.00	20.47
	ATOM	1587	CG	ASN	1040	14.183	40.081	31.274	1.00	23.86
50	ATOM	1588	OD1	ASN	1040	13.425	39.168	31.673	1.00	23.80
	ATOM	1589	ND2	ASN	1040	13.846	41.340	31.439	1.00	23.92
	ATOM	1590	HD21	ASN	1040	14.446	42.082	31.232	1.00	0.00
	ATOM	1591	HD22	ASN	1040	12.951	41.511	31.801	1.00	0.00
	ATOM	1592	C	ASN	1040	17.439	38.325	31.270	1.00	17.19
55	ATOM	1593	O	ASN	1040	17.446	37.919	30.111	1.00	18.56
	ATOM	1594	N	VAL	1041	18.402	38.045	32.138	1.00	14.89
	ATOM	1595	H	VAL	1041	18.318	38.403	33.045	1.00	0.00
	ATOM	1596	CA	VAL	1041	19.589	37.273	31.769	1.00	12.79
	ATOM	1597	CB	VAL	1041	20.846	37.608	32.657	1.00	11.91
60	ATOM	1598	CG1	VAL	1041	22.008	36.704	32.293	1.00	9.35
	ATOM	1599	CG2	VAL	1041	21.287	39.067	32.429	1.00	11.97
	ATOM	1600	C	VAL	1041	19.236	35.814	31.975	1.00	13.01

	ATOM	1601	O	VAL	1041	18.782	35.342	33.023	1.00	13.67
	ATOM	1602	N	VAL	1042	19.463	35.080	30.910	1.00	13.97
	ATOM	1603	H	VAL	1042	19.831	35.546	30.127	1.00	0.00
	ATOM	1604	CA	VAL	1042	19.250	33.625	30.851	1.00	15.76
5	ATOM	1605	CB	VAL	1042	18.271	33.533	29.579	1.00	18.17
	ATOM	1606	CG1	VAL	1042	18.859	32.744	28.426	1.00	20.29
	ATOM	1607	CG2	VAL	1042	16.881	33.178	30.165	1.00	15.10
	ATOM	1608	C	VAL	1042	20.642	32.904	30.842	1.00	14.66
	ATOM	1609	O	VAL	1042	21.630	33.341	30.230	1.00	14.32
10	ATOM	1610	N	LYS	1043	20.734	31.807	31.588	1.00	12.86
	ATOM	1611	H	LYS	1043	19.941	31.564	32.108	1.00	0.00
	ATOM	1612	CA	LYS	1043	21.950	30.995	31.700	1.00	12.57
	ATOM	1613	CB	LYS	1043	22.529	31.124	33.096	1.00	14.23
	ATOM	1614	CG	LYS	1043	23.228	32.499	33.187	1.00	16.81
15	ATOM	1615	CD	LYS	1043	23.225	33.044	34.625	1.00	14.38
	ATOM	1616	CE	LYS	1043	23.878	34.402	34.766	1.00	15.38
	ATOM	1617	NZ	LYS	1043	25.305	34.219	34.469	1.00	17.26
	ATOM	1618	HZ1	LYS	1043	25.425	33.680	33.585	1.00	0.00
	ATOM	1619	HZ2	LYS	1043	25.761	33.703	35.241	1.00	0.00
20	ATOM	1620	HZ3	LYS	1043	25.758	35.149	34.365	1.00	0.00
	ATOM	1621	C	LYS	1043	21.751	29.500	31.420	1.00	10.92
	ATOM	1622	O	LYS	1043	20.846	28.832	31.921	1.00	9.86
	ATOM	1623	N	ILE	1044	22.647	28.931	30.618	1.00	11.73
	ATOM	1624	H	ILE	1044	23.316	29.494	30.179	1.00	0.00
25	ATOM	1625	CA	ILE	1044	22.604	27.490	30.325	1.00	10.24
	ATOM	1626	CB	ILE	1044	23.460	27.172	29.057	1.00	11.24
	ATOM	1627	CG2	ILE	1044	23.409	25.619	28.922	1.00	8.07
	ATOM	1628	CG1	ILE	1044	22.976	27.906	27.731	1.00	10.71
	ATOM	1629	CD1	ILE	1044	24.068	27.938	26.666	1.00	7.01
30	ATOM	1630	C	ILE	1044	23.201	26.817	31.585	1.00	11.59
	ATOM	1631	O	ILE	1044	24.131	27.326	32.222	1.00	10.78
	ATOM	1632	N	CYS	1045	22.666	25.648	31.933	1.00	11.82
	ATOM	1633	H	CYS	1045	21.892	25.336	31.409	1.00	0.00
	ATOM	1634	CA	CYS	1045	23.079	24.844	33.079	1.00	10.85
35	ATOM	1635	CB	CYS	1045	22.265	25.219	34.362	1.00	8.76
	ATOM	1636	SG	CYS	1045	20.516	24.571	34.443	1.00	10.02
	ATOM	1637	C	CYS	1045	22.736	23.394	32.761	1.00	11.51
	ATOM	1638	O	CYS	1045	22.274	23.031	31.673	1.00	10.04
	ATOM	1639	N	ASP	1046	23.050	22.495	33.652	1.00	8.84
40	ATOM	1640	H	ASP	1046	23.619	22.742	34.414	1.00	0.00
	ATOM	1641	CA	ASP	1046	22.627	21.150	33.440	1.00	9.33
	ATOM	1642	CB	ASP	1046	23.730	20.289	32.728	1.00	13.32
	ATOM	1643	CG	ASP	1046	23.164	18.934	32.352	1.00	16.27
	ATOM	1644	OD1	ASP	1046	22.930	18.187	33.223	1.00	27.25
45	ATOM	1645	OD2	ASP	1046	22.986	18.526	31.233	1.00	23.89
	ATOM	1646	C	ASP	1046	22.355	20.599	34.832	1.00	11.27
	ATOM	1647	O	ASP	1046	23.315	20.375	35.579	1.00	12.92
	ATOM	1648	N	PHE	1047	21.088	20.398	35.219	1.00	9.88
	ATOM	1649	H	PHE	1047	20.376	20.679	34.599	1.00	0.00
50	ATOM	1650	CA	PHE	1047	20.757	19.802	36.542	1.00	11.80
	ATOM	1651	CB	PHE	1047	19.222	19.633	36.743	1.00	11.89
	ATOM	1652	CG	PHE	1047	18.527	20.878	37.166	1.00	12.30
	ATOM	1653	CD1	PHE	1047	18.328	21.960	36.262	1.00	12.56
	ATOM	1654	CD2	PHE	1047	18.013	20.982	38.460	1.00	7.78
55	ATOM	1655	CE1	PHE	1047	17.600	23.102	36.684	1.00	13.16
	ATOM	1656	CE2	PHE	1047	17.280	22.116	38.878	1.00	9.42
	ATOM	1657	CZ	PHE	1047	17.059	23.173	38.000	1.00	12.87
	ATOM	1658	C	PHE	1047	21.419	18.406	36.735	1.00	11.87
	ATOM	1659	O	PHE	1047	21.755	17.978	37.843	1.00	11.69
60	ATOM	1660	N	GLY	1048	21.617	17.635	35.666	1.00	10.68
	ATOM	1661	H	GLY	1048	21.269	17.975	34.826	1.00	0.00
	ATOM	1662	CA	GLY	1048	22.252	16.299	35.701	1.00	11.46



	ATOM	1663	C	GLY	1048	21.573	15.343	36.690	1.00	11.52
	ATOM	1664	O	GLY	1048	20.351	15.069	36.667	1.00	14.19
	ATOM	1665	N	LEU	1049	22.428	14.888	37.602	1.00	11.31
	ATOM	1666	H	LEU	1049	23.358	15.079	37.378	1.00	0.00
5	ATOM	1667	CA	LEU	1049	22.141	13.978	38.726	1.00	12.93
	ATOM	1668	CB	LEU	1049	23.433	13.667	39.477	1.00	14.88
	ATOM	1669	CG	LEU	1049	24.181	12.324	39.297	1.00	19.55
	ATOM	1670	CD1	LEU	1049	23.773	11.555	38.036	1.00	21.51
	ATOM	1671	CD2	LEU	1049	25.645	12.649	39.412	1.00	21.23
10	ATOM	1672	C	LEU	1049	21.137	14.574	39.658	1.00	13.93
	ATOM	1673	O	LEU	1049	20.499	13.838	40.406	1.00	13.22
	ATOM	1674	N	ALA	1050	20.960	15.892	39.651	1.00	13.55
	ATOM	1675	H	ALA	1050	21.497	16.446	39.052	1.00	0.00
	ATOM	1676	CA	ALA	1050	19.931	16.551	40.504	1.00	14.90
15	ATOM	1677	CB	ALA	1050	20.288	18.016	40.872	1.00	13.55
	ATOM	1678	C	ALA	1050	18.556	16.611	39.805	1.00	15.22
	ATOM	1679	O	ALA	1050	17.702	17.466	40.064	1.00	16.00
	ATOM	1680	N	ARG	1051	18.417	15.844	38.738	1.00	14.64
	ATOM	1681	H	ARG	1051	19.172	15.324	38.390	1.00	0.00
20	ATOM	1682	CA	ARG	1051	17.127	15.759	38.073	1.00	17.53
	ATOM	1683	CB	ARG	1051	17.212	16.077	36.572	1.00	16.36
	ATOM	1684	CG	ARG	1051	15.778	15.911	36.037	1.00	17.81
	ATOM	1685	CD	ARG	1051	15.712	16.421	34.631	1.00	16.00
	ATOM	1686	NE	ARG	1051	15.637	17.874	34.682	1.00	16.07
25	ATOM	1687	HE	ARG	1051	14.851	18.299	35.084	1.00	0.00
	ATOM	1688	CZ	ARG	1051	16.591	18.661	34.189	1.00	15.99
	ATOM	1689	NH1	ARG	1051	16.408	19.983	34.257	1.00	15.96
	ATOM	1690	HH11	ARG	1051	15.567	20.347	34.664	1.00	0.00
	ATOM	1691	HH12	ARG	1051	17.099	20.609	33.892	1.00	0.00
30	ATOM	1692	NH2	ARG	1051	17.726	18.175	33.682	1.00	18.87
	ATOM	1693	HH21	ARG	1051	17.899	17.190	33.670	1.00	0.00
	ATOM	1694	HH22	ARG	1051	18.414	18.806	33.324	1.00	0.00
	ATOM	1695	C	ARG	1051	16.715	14.307	38.200	1.00	17.98
	ATOM	1696	O	ARG	1051	17.551	13.422	37.952	1.00	17.06
35	ATOM	1697	N	ASP	1052	15.502	14.036	38.614	1.00	18.96
	ATOM	1698	H	ASP	1052	15.017	14.760	39.063	1.00	0.00
	ATOM	1699	CA	ASP	1052	15.042	12.640	38.685	1.00	24.01
	ATOM	1700	CB	ASP	1052	13.845	12.556	39.619	1.00	27.34
	ATOM	1701	CG	ASP	1052	13.606	11.136	40.165	1.00	33.51
40	ATOM	1702	OD1	ASP	1052	14.099	10.111	39.611	1.00	31.37
	ATOM	1703	OD2	ASP	1052	12.904	11.126	41.200	1.00	36.84
	ATOM	1704	C	ASP	1052	14.653	12.118	37.288	1.00	25.02
	ATOM	1705	O	ASP	1052	13.460	12.069	36.924	1.00	25.50
	ATOM	1706	N	ILE	1053	15.621	11.683	36.492	1.00	24.60
45	ATOM	1707	H	ILE	1053	16.557	11.778	36.781	1.00	0.00
	ATOM	1708	CA	ILE	1053	15.265	11.241	35.137	1.00	26.72
	ATOM	1709	CB	ILE	1053	16.518	11.008	34.289	1.00	28.03
	ATOM	1710	CG2	ILE	1053	17.247	12.364	34.233	1.00	25.09
	ATOM	1711	CG1	ILE	1053	17.368	9.837	34.804	1.00	29.32
50	ATOM	1712	CD1	ILE	1053	18.564	9.617	33.850	1.00	29.13
	ATOM	1713	C	ILE	1053	14.388	10.001	35.060	1.00	29.05
	ATOM	1714	O	ILE	1053	13.915	9.623	33.990	1.00	28.34
	ATOM	1715	N	TYR	1054	14.247	9.302	36.182	1.00	29.71
	ATOM	1716	H	TYR	1054	14.809	9.538	36.946	1.00	0.00
55	ATOM	1717	CA	TYR	1054	13.366	8.132	36.245	1.00	31.48
	ATOM	1718	CB	TYR	1054	13.834	7.214	37.368	1.00	34.91
	ATOM	1719	C	TYR	1054	11.917	8.582	36.495	1.00	31.67
	ATOM	1720	O	TYR	1054	10.990	7.855	36.219	1.00	34.58
	ATOM	1721	N	LYS	1055	11.654	9.700	37.150	1.00	32.28
60	ATOM	1722	H	LYS	1055	12.389	10.214	37.534	1.00	0.00
	ATOM	1723	CA	LYS	1055	10.264	10.148	37.347	1.00	31.89
	ATOM	1724	CB	LYS	1055	10.086	10.783	38.731	1.00	30.29

	ATOM	1725	C	LYS	1055	9.886	11.208	36.278	1.00	32.88
	ATOM	1726	O	LYS	1055	8.717	11.485	35.967	1.00	33.91
	ATOM	1727	N	ASP	1056	10.893	11.892	35.718	1.00	31.58
	ATOM	1728	H	ASP	1056	11.801	11.682	35.999	1.00	0.00
5	ATOM	1729	CA	ASP	1056	10.669	12.952	34.707	1.00	26.78
	ATOM	1730	CB	ASP	1056	11.963	13.732	34.532	1.00	24.66
	ATOM	1731	CG	ASP	1056	11.770	15.041	33.834	1.00	25.19
	ATOM	1732	OD1	ASP	1056	12.527	15.936	34.100	1.00	29.52
	ATOM	1733	OD2	ASP	1056	10.896	15.229	33.012	1.00	27.75
10	ATOM	1734	C	ASP	1056	10.172	12.498	33.344	1.00	25.34
	ATOM	1735	O	ASP	1056	10.882	11.842	32.582	1.00	26.66
	ATOM	1736	N	PRO	1057	8.992	12.967	32.928	1.00	24.66
	ATOM	1737	CD	PRO	1057	8.067	13.795	33.695	1.00	23.67
	ATOM	1738	CA	PRO	1057	8.422	12.584	31.638	1.00	24.43
15	ATOM	1739	CB	PRO	1057	7.051	13.275	31.668	1.00	24.45
	ATOM	1740	CG	PRO	1057	7.298	14.449	32.594	1.00	24.63
	ATOM	1741	C	PRO	1057	9.279	12.895	30.400	1.00	23.15
	ATOM	1742	O	PRO	1057	9.163	12.233	29.370	1.00	23.87
	ATOM	1743	N	ASP	1058	10.177	13.871	30.463	1.00	19.84
20	ATOM	1744	H	ASP	1058	10.273	14.330	31.316	1.00	0.00
	ATOM	1745	CA	ASP	1058	11.052	14.243	29.304	1.00	19.06
	ATOM	1746	CB	ASP	1058	11.714	15.592	29.636	1.00	17.76
	ATOM	1747	CG	ASP	1058	10.716	16.731	29.862	1.00	20.26
	ATOM	1748	OD1	ASP	1058	11.147	17.797	30.304	1.00	19.57
25	ATOM	1749	OD2	ASP	1058	9.524	16.568	29.547	1.00	20.95
	ATOM	1750	C	ASP	1058	12.108	13.194	28.910	1.00	19.02
	ATOM	1751	O	ASP	1058	12.747	13.255	27.835	1.00	20.42
	ATOM	1752	N	TYR	1059	12.356	12.287	29.856	1.00	18.19
	ATOM	1753	H	TYR	1059	11.824	12.282	30.675	1.00	0.00
30	ATOM	1754	CA	TYR	1059	13.320	11.224	29.657	1.00	19.80
	ATOM	1755	CB	TYR	1059	14.244	11.095	30.919	1.00	17.13
	ATOM	1756	CG	TYR	1059	14.920	12.382	31.069	1.00	14.44
	ATOM	1757	CD1	TYR	1059	14.288	13.433	31.734	1.00	14.82
	ATOM	1758	CE1	TYR	1059	14.963	14.653	31.802	1.00	15.36
35	ATOM	1759	CD2	TYR	1059	16.187	12.545	30.487	1.00	16.12
	ATOM	1760	CE2	TYR	1059	16.870	13.765	30.556	1.00	13.72
	ATOM	1761	CZ	TYR	1059	16.244	14.832	31.221	1.00	16.26
	ATOM	1762	OH	TYR	1059	16.893	16.071	31.247	1.00	15.37
	ATOM	1763	HH	TYR	1059	17.684	15.928	30.752	1.00	0.00
40	ATOM	1764	C	TYR	1059	12.537	9.909	29.363	1.00	23.58
	ATOM	1765	O	TYR	1059	11.647	9.487	30.100	1.00	25.74
	ATOM	1766	N	VAL	1060	12.840	9.268	28.240	1.00	23.40
	ATOM	1767	H	VAL	1060	13.522	9.672	27.686	1.00	0.00
	ATOM	1768	CA	VAL	1060	12.219	8.029	27.767	1.00	24.62
45	ATOM	1769	CB	VAL	1060	11.729	8.329	26.346	1.00	23.22
	ATOM	1770	CG1	VAL	1060	11.150	7.115	25.676	1.00	25.04
	ATOM	1771	CG2	VAL	1060	10.614	9.371	26.433	1.00	22.91
	ATOM	1772	C	VAL	1060	13.202	6.884	27.822	1.00	24.55
	ATOM	1773	O	VAL	1060	14.386	7.050	27.528	1.00	23.79
50	ATOM	1774	N	ARG	1061	12.771	5.718	28.329	1.00	28.17
	ATOM	1775	H	ARG	1061	11.844	5.599	28.616	1.00	0.00
	ATOM	1776	CA	ARG	1061	13.689	4.555	28.383	1.00	29.35
	ATOM	1777	CB	ARG	1061	13.093	3.350	29.176	1.00	28.85
	ATOM	1778	C	ARG	1061	14.029	4.046	26.966	1.00	31.49
55	ATOM	1779	O	ARG	1061	13.164	3.769	26.135	1.00	29.75
	ATOM	1780	N	LYS	1062	15.307	4.080	26.641	1.00	33.46
	ATOM	1781	H	LYS	1062	15.940	4.435	27.299	1.00	0.00
	ATOM	1782	CA	LYS	1062	15.784	3.577	25.372	1.00	36.68
	ATOM	1783	CB	LYS	1062	16.271	4.671	24.387	1.00	35.70
60	ATOM	1784	C	LYS	1062	16.992	2.767	25.847	1.00	39.49
	ATOM	1785	O	LYS	1062	17.898	3.295	26.503	1.00	40.19
	ATOM	1786	N	GLY	1063	16.976	1.445	25.611	1.00	42.19

	ATOM	1787	H	GLY	1063	16.176	1.070	25.194	1.00	0.00
	ATOM	1788	CA	GLY	1063	18.066	0.544	26.028	1.00	44.40
	ATOM	1789	C	GLY	1063	18.212	0.641	27.539	1.00	45.83
	ATOM	1790	O	GLY	1063	17.194	0.649	28.247	1.00	46.41
5	ATOM	1791	N	ASP	1064	19.452	0.682	28.059	1.00	47.75
	ATOM	1792	H	ASP	1064	20.232	0.618	27.467	1.00	0.00
	ATOM	1793	CA	ASP	1064	19.615	0.822	29.542	1.00	49.27
	ATOM	1794	CB	ASP	1064	20.915	0.041	30.046	1.00	53.99
	ATOM	1795	CG	ASP	1064	20.684	-1.488	30.178	1.00	58.07
10	ATOM	1796	OD1	ASP	1064	19.665	-1.910	30.758	1.00	60.86
	ATOM	1797	OD2	ASP	1064	21.539	-2.249	29.702	1.00	59.76
	ATOM	1798	C	ASP	1064	19.667	2.315	30.011	1.00	46.74
	ATOM	1799	O	ASP	1064	19.975	2.656	31.160	1.00	46.23
	ATOM	1800	N	ALA	1065	19.359	3.242	29.096	1.00	42.79
15	ATOM	1801	H	ALA	1065	19.073	2.944	28.210	1.00	0.00
	ATOM	1802	CA	ALA	1065	19.345	4.679	29.389	1.00	37.95
	ATOM	1803	CB	ALA	1065	20.216	5.358	28.359	1.00	36.02
	ATOM	1804	C	ALA	1065	17.947	5.316	29.353	1.00	35.92
	ATOM	1805	O	ALA	1065	17.027	4.820	28.716	1.00	36.36
20	ATOM	1806	N	ARG	1066	17.726	6.381	30.106	1.00	31.64
	ATOM	1807	H	ARG	1066	18.449	6.680	30.689	1.00	0.00
	ATOM	1808	CA	ARG	1066	16.453	7.134	30.055	1.00	29.92
	ATOM	1809	CB	ARG	1066	15.848	7.293	31.485	1.00	27.88
	ATOM	1810	C	ARG	1066	16.915	8.492	29.417	1.00	27.53
25	ATOM	1811	O	ARG	1066	17.651	9.311	29.989	1.00	24.43
	ATOM	1812	N	LEU	1067	16.657	8.582	28.105	1.00	25.33
	ATOM	1813	H	LEU	1067	16.135	7.847	27.705	1.00	0.00
	ATOM	1814	CA	LEU	1067	17.072	9.712	27.261	1.00	22.13
	ATOM	1815	CB	LEU	1067	17.524	9.085	25.942	1.00	22.52
30	ATOM	1816	CG	LEU	1067	18.637	8.044	26.100	1.00	24.34
	ATOM	1817	CD1	LEU	1067	18.648	7.194	24.846	1.00	25.35
	ATOM	1818	CD2	LEU	1067	20.015	8.682	26.273	1.00	25.54
	ATOM	1819	C	LEU	1067	16.085	10.834	27.022	1.00	19.74
	ATOM	1820	O	LEU	1067	14.886	10.576	26.953	1.00	20.57
35	ATOM	1821	N	PRO	1068	16.514	12.095	26.829	1.00	16.83
	ATOM	1822	CD	PRO	1068	17.894	12.594	26.980	1.00	13.07
	ATOM	1823	CA	PRO	1068	15.584	13.207	26.436	1.00	17.55
	ATOM	1824	CB	PRO	1068	16.340	14.473	26.812	1.00	12.43
	ATOM	1825	CG	PRO	1068	17.746	14.015	26.417	1.00	12.72
40	ATOM	1826	C	PRO	1068	15.246	13.118	24.908	1.00	17.39
	ATOM	1827	O	PRO	1068	15.586	13.981	24.070	1.00	15.68
	ATOM	1828	N	LEU	1069	14.511	12.065	24.547	1.00	17.62
	ATOM	1829	H	LEU	1069	14.205	11.453	25.251	1.00	0.00
	ATOM	1830	CA	LEU	1069	14.171	11.784	23.144	1.00	18.32
45	ATOM	1831	CB	LEU	1069	13.290	10.489	23.138	1.00	22.67
	ATOM	1832	CG	LEU	1069	13.919	9.025	22.959	1.00	26.88
	ATOM	1833	CD1	LEU	1069	15.251	9.024	22.133	1.00	26.83
	ATOM	1834	CD2	LEU	1069	14.369	8.474	24.275	1.00	30.33
	ATOM	1835	C	LEU	1069	13.510	12.906	22.305	1.00	17.35
50	ATOM	1836	O	LEU	1069	13.855	13.119	21.143	1.00	16.55
	ATOM	1837	N	LYS	1070	12.559	13.682	22.805	1.00	16.29
	ATOM	1838	H	LYS	1070	12.141	13.442	23.652	1.00	0.00
	ATOM	1839	CA	LYS	1070	11.948	14.773	22.023	1.00	15.31
	ATOM	1840	CB	LYS	1070	10.772	15.341	22.831	1.00	12.67
55	ATOM	1841	CG	LYS	1070	9.649	14.336	22.945	1.00	15.20
	ATOM	1842	CD	LYS	1070	8.310	14.945	23.352	1.00	13.69
	ATOM	1843	CE	LYS	1070	8.386	15.451	24.748	1.00	18.32
	ATOM	1844	NZ	LYS	1070	7.015	15.810	25.146	1.00	18.86
	ATOM	1845	HZ1	LYS	1070	6.402	15.017	24.878	1.00	0.00
60	ATOM	1846	HZ2	LYS	1070	6.702	16.660	24.637	1.00	0.00
	ATOM	1847	HZ3	LYS	1070	6.945	15.973	26.170	1.00	0.00
	ATOM	1848	C	LYS	1070	12.911	15.921	21.616	1.00	15.10

	ATOM	1849	O	LYS	1070	12.562	16.791	20.816	1.00	14.34
	ATOM	1850	N	TRP	1071	14.095	15.974	22.269	1.00	14.23
	ATOM	1851	H	TRP	1071	14.275	15.289	22.942	1.00	0.00
	ATOM	1852	CA	TRP	1071	15.126	17.001	22.040	1.00	13.76
5	ATOM	1853	CB	TRP	1071	15.644	17.517	23.387	1.00	9.42
	ATOM	1854	CG	TRP	1071	14.717	18.384	24.135	1.00	10.36
	ATOM	1855	CD2	TRP	1071	13.589	18.024	24.923	1.00	11.17
	ATOM	1856	CE2	TRP	1071	12.953	19.242	25.294	1.00	12.63
	ATOM	1857	CE3	TRP	1071	13.015	16.784	25.324	1.00	12.10
10	ATOM	1858	CD1	TRP	1071	14.739	19.778	24.109	1.00	9.84
	ATOM	1859	NE1	TRP	1071	13.667	20.276	24.764	1.00	10.51
	ATOM	1860	HE1	TRP	1071	13.439	21.211	24.776	1.00	0.00
	ATOM	1861	CZ2	TRP	1071	11.754	19.192	26.047	1.00	12.27
	ATOM	1862	CZ3	TRP	1071	11.839	16.763	26.098	1.00	13.68
15	ATOM	1863	CH2	TRP	1071	11.203	17.963	26.451	1.00	10.07
	ATOM	1864	C	TRP	1071	16.309	16.470	21.240	1.00	14.54
	ATOM	1865	O	TRP	1071	17.233	17.195	20.863	1.00	14.21
	ATOM	1866	N	MET	1072	16.309	15.162	21.006	1.00	14.72
	ATOM	1867	H	MET	1072	15.539	14.625	21.288	1.00	0.00
20	ATOM	1868	CA	MET	1072	17.416	14.549	20.302	1.00	15.92
	ATOM	1869	CB	MET	1072	17.586	13.154	20.845	1.00	17.46
	ATOM	1870	CG	MET	1072	18.170	13.146	22.268	1.00	18.40
	ATOM	1871	SD	MET	1072	17.908	11.533	23.094	1.00	20.58
	ATOM	1872	CE	MET	1072	19.156	10.567	22.210	1.00	16.27
25	ATOM	1873	C	MET	1072	17.401	14.497	18.796	1.00	16.71
	ATOM	1874	O	MET	1072	16.414	14.062	18.188	1.00	19.44
	ATOM	1875	N	ALA	1073	18.520	14.832	18.173	1.00	16.04
	ATOM	1876	H	ALA	1073	19.202	15.228	18.746	1.00	0.00
	ATOM	1877	CA	ALA	1073	18.623	14.752	16.697	1.00	18.51
30	ATOM	1878	CB	ALA	1073	19.985	15.311	16.273	1.00	16.05
	ATOM	1879	C	ALA	1073	18.466	13.292	16.167	1.00	20.79
	ATOM	1880	O	ALA	1073	18.859	12.328	16.867	1.00	19.42
	ATOM	1881	N	PRO	1074	18.026	13.046	14.902	1.00	23.07
	ATOM	1882	CD	PRO	1074	17.685	14.021	13.842	1.00	22.37
35	ATOM	1883	CA	PRO	1074	17.947	11.624	14.365	1.00	23.46
	ATOM	1884	CB	PRO	1074	17.511	11.760	12.880	1.00	23.59
	ATOM	1885	CG	PRO	1074	16.869	13.158	12.825	1.00	24.69
	ATOM	1886	C	PRO	1074	19.282	10.843	14.506	1.00	23.31
	ATOM	1887	O	PRO	1074	19.316	9.717	15.002	1.00	22.30
40	ATOM	1888	N	GLU	1075	20.446	11.432	14.182	1.00	22.55
	ATOM	1889	H	GLU	1075	20.392	12.353	13.866	1.00	0.00
	ATOM	1890	CA	GLU	1075	21.718	10.673	14.327	1.00	22.16
	ATOM	1891	CB	GLU	1075	22.919	11.438	13.753	1.00	20.97
	ATOM	1892	CG	GLU	1075	23.418	12.787	14.357	1.00	21.73
45	ATOM	1893	CD	GLU	1075	22.552	14.019	14.108	1.00	22.70
	ATOM	1894	OE1	GLU	1075	21.472	13.916	13.485	1.00	18.63
	ATOM	1895	OE2	GLU	1075	22.993	15.087	14.565	1.00	20.61
	ATOM	1896	C	GLU	1075	22.031	10.308	15.755	1.00	22.72
	ATOM	1897	O	GLU	1075	22.732	9.340	15.995	1.00	23.22
50	ATOM	1898	N	THR	1076	21.485	11.012	16.758	1.00	21.66
	ATOM	1899	H	THR	1076	20.894	11.762	16.542	1.00	0.00
	ATOM	1900	CA	THR	1076	21.753	10.674	18.189	1.00	22.13
	ATOM	1901	CB	THR	1076	21.512	11.855	19.195	1.00	20.77
	ATOM	1902	OG1	THR	1076	22.162	13.069	18.759	1.00	21.70
55	ATOM	1903	HG1	THR	1076	22.350	13.610	19.537	1.00	0.00
	ATOM	1904	CG2	THR	1076	22.048	11.458	20.554	1.00	19.94
	ATOM	1905	C	THR	1076	20.840	9.546	18.614	1.00	21.24
	ATOM	1906	O	THR	1076	21.273	8.640	19.307	1.00	22.21
	ATOM	1907	N	ILE	1077	19.588	9.588	18.216	1.00	20.24
60	ATOM	1908	H	ILE	1077	19.305	10.359	17.679	1.00	0.00
	ATOM	1909	CA	ILE	1077	18.617	8.554	18.527	1.00	22.51
	ATOM	1910	CB	ILE	1077	17.235	8.994	17.942	1.00	23.18

	ATOM	1911	CG2	ILE	1077	16.210	7.818	17.948	1.00	21.76
	ATOM	1912	CG1	ILE	1077	16.686	10.198	18.759	1.00	20.69
	ATOM	1913	CD1	ILE	1077	15.355	10.645	18.089	1.00	20.25
	ATOM	1914	C	ILE	1077	19.114	7.246	17.865	1.00	23.82
5	ATOM	1915	O	ILE	1077	19.303	6.215	18.488	1.00	24.80
	ATOM	1916	N	PHE	1078	19.393	7.303	16.593	1.00	24.53
	ATOM	1917	H	PHE	1078	19.278	8.154	16.131	1.00	0.00
	ATOM	1918	CA	PHE	1078	19.809	6.121	15.835	1.00	25.71
	ATOM	1919	CB	PHE	1078	19.401	6.362	14.355	1.00	28.19
10	ATOM	1920	CG	PHE	1078	17.924	6.517	14.225	1.00	28.83
	ATOM	1921	CD1	PHE	1078	17.387	7.763	13.838	1.00	30.54
	ATOM	1922	CD2	PHE	1078	17.065	5.433	14.517	1.00	30.28
	ATOM	1923	CE1	PHE	1078	16.005	7.945	13.749	1.00	27.83
	ATOM	1924	CE2	PHE	1078	15.683	5.618	14.423	1.00	29.63
15	ATOM	1925	CZ	PHE	1078	15.183	6.873	14.047	1.00	28.29
	ATOM	1926	C	PHE	1078	21.257	5.697	15.918	1.00	26.20
	ATOM	1927	O	PHE	1078	21.558	4.512	15.999	1.00	28.34
	ATOM	1928	N	ASP	1079	22.193	6.613	15.834	1.00	25.31
	ATOM	1929	H	ASP	1079	21.927	7.541	15.678	1.00	0.00
20	ATOM	1930	CA	ASP	1079	23.634	6.243	15.922	1.00	27.48
	ATOM	1931	CB	ASP	1079	24.369	6.868	14.720	1.00	29.18
	ATOM	1932	CG	ASP	1079	23.606	6.525	13.441	1.00	35.25
	ATOM	1933	OD1	ASP	1079	23.009	5.443	13.356	1.00	35.56
	ATOM	1934	OD2	ASP	1079	23.587	7.361	12.527	1.00	39.44
25	ATOM	1935	C	ASP	1079	24.374	6.617	17.211	1.00	26.16
	ATOM	1936	O	ASP	1079	25.579	6.445	17.319	1.00	24.78
	ATOM	1937	N	ARG	1080	23.681	7.136	18.227	1.00	26.25
	ATOM	1938	H	ARG	1080	22.711	7.214	18.128	1.00	0.00
	ATOM	1939	CA	ARG	1080	24.296	7.556	19.507	1.00	27.00
30	ATOM	1940	CB	ARG	1080	24.801	6.296	20.282	1.00	29.85
	ATOM	1941	CG	ARG	1080	23.568	5.447	20.655	1.00	36.91
	ATOM	1942	CD	ARG	1080	23.870	4.155	21.419	1.00	43.98
	ATOM	1943	NE	ARG	1080	24.830	3.325	20.656	1.00	52.39
	ATOM	1944	HE	ARG	1080	25.355	3.730	19.934	1.00	0.00
35	ATOM	1945	CZ	ARG	1080	25.051	2.041	20.997	1.00	55.08
	ATOM	1946	NH1	ARG	1080	25.926	1.327	20.288	1.00	55.49
	ATOM	1947	HH11	ARG	1080	26.402	1.739	19.516	1.00	0.00
	ATOM	1948	HH12	ARG	1080	26.112	0.372	20.522	1.00	0.00
	ATOM	1949	NH2	ARG	1080	24.379	1.447	22.007	1.00	57.11
40	ATOM	1950	HH21	ARG	1080	23.699	1.948	22.539	1.00	0.00
	ATOM	1951	HH22	ARG	1080	24.580	0.491	22.224	1.00	0.00
	ATOM	1952	C	ARG	1080	25.421	8.531	19.259	1.00	24.84
	ATOM	1953	O	ARG	1080	26.414	8.637	19.969	1.00	25.51
	ATOM	1954	N	VAL	1081	25.287	9.300	18.209	1.00	23.54
45	ATOM	1955	H	VAL	1081	24.502	9.194	17.640	1.00	0.00
	ATOM	1956	CA	VAL	1081	26.308	10.281	17.873	1.00	21.42
	ATOM	1957	CB	VAL	1081	26.372	10.418	16.339	1.00	22.00
	ATOM	1958	CG1	VAL	1081	27.223	11.609	15.924	1.00	21.89
	ATOM	1959	CG2	VAL	1081	27.089	9.219	15.768	1.00	21.70
50	ATOM	1960	C	VAL	1081	25.967	11.602	18.511	1.00	20.77
	ATOM	1961	O	VAL	1081	24.853	12.083	18.287	1.00	21.11
	ATOM	1962	N	TYR	1082	26.836	12.184	19.347	1.00	18.96
	ATOM	1963	H	TYR	1082	27.640	11.680	19.574	1.00	0.00
	ATOM	1964	CA	TYR	1082	26.591	13.525	19.944	1.00	18.10
55	ATOM	1965	CB	TYR	1082	26.728	13.547	21.489	1.00	18.98
	ATOM	1966	CG	TYR	1082	25.718	12.780	22.211	1.00	20.13
	ATOM	1967	CD1	TYR	1082	25.860	11.387	22.356	1.00	22.82
	ATOM	1968	CE1	TYR	1082	24.837	10.636	22.998	1.00	24.04
	ATOM	1969	CD2	TYR	1082	24.582	13.437	22.695	1.00	19.88
60	ATOM	1970	CE2	TYR	1082	23.583	12.684	23.330	1.00	21.27
	ATOM	1971	CZ	TYR	1082	23.691	11.297	23.472	1.00	21.80
	ATOM	1972	OH	TYR	1082	22.633	10.570	23.980	1.00	23.40

	ATOM	1973	HH	TYR	1082	22.893	9.645	24.028	1.00	0.00
	ATOM	1974	C	TYR	1082	27.614	14.552	19.399	1.00	19.84
	ATOM	1975	O	TYR	1082	28.824	14.323	19.418	1.00	19.93
	ATOM	1976	N	THR	1083	27.193	15.675	18.797	1.00	18.33
5	ATOM	1977	H	THR	1083	26.228	15.832	18.750	1.00	0.00
	ATOM	1978	CA	THR	1083	28.121	16.711	18.270	1.00	17.28
	ATOM	1979	CB	THR	1083	28.367	16.524	16.730	1.00	17.78
	ATOM	1980	OG1	THR	1083	27.208	16.974	16.034	1.00	19.19
	ATOM	1981	HG1	THR	1083	27.367	16.780	15.090	1.00	0.00
10	ATOM	1982	CG2	THR	1083	28.725	15.051	16.370	1.00	17.63
	ATOM	1983	C	THR	1083	27.531	18.139	18.543	1.00	15.31
	ATOM	1984	O	THR	1083	26.390	18.158	18.975	1.00	14.90
	ATOM	1985	N	ILE	1084	28.177	19.349	18.425	1.00	15.29
	ATOM	1986	H	ILE	1084	29.151	19.367	18.275	1.00	0.00
15	ATOM	1987	CA	ILE	1084	27.393	20.605	18.745	1.00	15.51
	ATOM	1988	CB	ILE	1084	28.074	22.072	18.689	1.00	18.91
	ATOM	1989	CG2	ILE	1084	28.055	22.834	20.102	1.00	17.08
	ATOM	1990	CG1	ILE	1084	29.375	21.868	17.966	1.00	22.06
	ATOM	1991	CD1	ILE	1084	29.295	21.705	16.431	1.00	16.92
20	ATOM	1992	C	ILE	1084	26.321	20.681	17.703	1.00	13.12
	ATOM	1993	O	ILE	1084	25.359	21.370	17.917	1.00	11.48
	ATOM	1994	N	GLN	1085	26.459	20.001	16.548	1.00	15.29
	ATOM	1995	H	GLN	1085	27.305	19.538	16.380	1.00	0.00
	ATOM	1996	CA	GLN	1085	25.365	20.044	15.534	1.00	17.41
25	ATOM	1997	CB	GLN	1085	25.770	19.496	14.092	1.00	17.64
	ATOM	1998	CG	GLN	1085	26.671	20.592	13.376	1.00	18.83
	ATOM	1999	CD	GLN	1085	26.236	22.094	13.497	1.00	21.22
	ATOM	2000	OE1	GLN	1085	26.756	22.924	14.264	1.00	22.33
	ATOM	2001	NE2	GLN	1085	25.277	22.540	12.722	1.00	20.51
30	ATOM	2002	HE21	GLN	1085	24.818	21.961	12.082	1.00	0.00
	ATOM	2003	HE22	GLN	1085	25.012	23.478	12.805	1.00	0.00
	ATOM	2004	C	GLN	1085	24.167	19.289	16.037	1.00	15.85
	ATOM	2005	O	GLN	1085	23.039	19.574	15.653	1.00	15.45
	ATOM	2006	N	SER	1086	24.329	18.264	16.847	1.00	15.04
35	ATOM	2007	H	SER	1086	25.216	17.946	17.114	1.00	0.00
	ATOM	2008	CA	SER	1086	23.115	17.645	17.394	1.00	14.79
	ATOM	2009	CB	SER	1086	23.388	16.209	17.891	1.00	14.65
	ATOM	2010	OG	SER	1086	24.299	16.110	18.923	1.00	13.69
	ATOM	2011	HG	SER	1086	24.297	15.198	19.239	1.00	0.00
40	ATOM	2012	C	SER	1086	22.619	18.595	18.520	1.00	15.96
	ATOM	2013	O	SER	1086	21.415	18.684	18.810	1.00	19.76
	ATOM	2014	N	ASP	1087	23.496	19.393	19.171	1.00	16.08
	ATOM	2015	H	ASP	1087	24.455	19.270	19.010	1.00	0.00
	ATOM	2016	CA	ASP	1087	23.000	20.409	20.170	1.00	15.55
45	ATOM	2017	CB	ASP	1087	24.137	21.178	20.942	1.00	14.72
	ATOM	2018	CG	ASP	1087	24.792	20.342	22.047	1.00	14.26
	ATOM	2019	OD1	ASP	1087	25.847	20.761	22.502	1.00	14.92
	ATOM	2020	OD2	ASP	1087	24.271	19.330	22.517	1.00	15.51
	ATOM	2021	C	ASP	1087	22.198	21.500	19.395	1.00	16.25
50	ATOM	2022	O	ASP	1087	21.302	22.101	19.990	1.00	15.61
	ATOM	2023	N	VAL	1088	22.542	21.832	18.094	1.00	14.64
	ATOM	2024	H	VAL	1088	23.390	21.501	17.749	1.00	0.00
	ATOM	2025	CA	VAL	1088	21.761	22.810	17.307	1.00	12.31
	ATOM	2026	CB	VAL	1088	22.395	23.087	15.919	1.00	13.18
55	ATOM	2027	CG1	VAL	1088	21.397	23.836	14.986	1.00	9.31
	ATOM	2028	CG2	VAL	1088	23.604	24.036	16.122	1.00	10.69
	ATOM	2029	C	VAL	1088	20.378	22.231	17.125	1.00	12.72
	ATOM	2030	O	VAL	1088	19.407	22.968	17.333	1.00	14.83
	ATOM	2031	N	TRP	1089	20.235	20.923	16.825	1.00	11.68
60	ATOM	2032	H	TRP	1089	21.041	20.398	16.619	1.00	0.00
	ATOM	2033	CA	TRP	1089	18.906	20.301	16.741	1.00	11.09
	ATOM	2034	CB	TRP	1089	19.017	18.774	16.540	1.00	13.31

	ATOM	2035	CG	TRP	1089	17.662	18.121	16.470	1.00	14.82
	ATOM	2036	CD2	TRP	1089	16.974	17.650	15.299	1.00	14.04
	ATOM	2037	CE2	TRP	1089	15.705	17.187	15.717	1.00	14.01
	ATOM	2038	CE3	TRP	1089	17.328	17.569	13.931	1.00	15.02
5	ATOM	2039	CD1	TRP	1089	16.767	17.932	17.540	1.00	13.39
	ATOM	2040	NE1	TRP	1089	15.601	17.362	17.086	1.00	13.52
	ATOM	2041	HE1	TRP	1089	14.821	17.083	17.632	1.00	0.00
	ATOM	2042	CZ2	TRP	1089	14.803	16.670	14.756	1.00	14.67
	ATOM	2043	CZ3	TRP	1089	16.429	17.037	12.982	1.00	14.57
10	ATOM	2044	CH2	TRP	1089	15.171	16.589	13.401	1.00	16.41
	ATOM	2045	C	TRP	1089	18.110	20.564	18.050	1.00	12.77
	ATOM	2046	O	TRP	1089	16.977	21.069	18.027	1.00	12.13
	ATOM	2047	N	SER	1090	18.709	20.225	19.230	1.00	14.14
	ATOM	2048	H	SER	1090	19.549	19.716	19.212	1.00	0.00
15	ATOM	2049	CA	SER	1090	18.054	20.470	20.565	1.00	13.41
	ATOM	2050	CB	SER	1090	18.923	20.060	21.786	1.00	12.03
	ATOM	2051	OG	SER	1090	19.302	18.707	21.576	1.00	12.15
	ATOM	2052	HG	SER	1090	19.503	18.265	22.409	1.00	0.00
	ATOM	2053	C	SER	1090	17.773	21.949	20.718	1.00	12.77
20	ATOM	2054	O	SER	1090	16.745	22.313	21.292	1.00	12.00
	ATOM	2055	N	PHE	1091	18.659	22.854	20.223	1.00	12.28
	ATOM	2056	H	PHE	1091	19.465	22.510	19.783	1.00	0.00
	ATOM	2057	CA	PHE	1091	18.398	24.325	20.302	1.00	11.24
	ATOM	2058	CB	PHE	1091	19.593	25.102	19.746	1.00	10.19
25	ATOM	2059	CG	PHE	1091	19.366	26.553	19.860	1.00	10.96
	ATOM	2060	CD1	PHE	1091	19.565	27.209	21.095	1.00	10.49
	ATOM	2061	CD2	PHE	1091	18.996	27.292	18.716	1.00	11.67
	ATOM	2062	CE1	PHE	1091	19.410	28.604	21.211	1.00	5.78
	ATOM	2063	CE2	PHE	1091	18.836	28.684	18.834	1.00	11.29
30	ATOM	2064	CZ	PHE	1091	19.050	29.328	20.081	1.00	10.28
	ATOM	2065	C	PHE	1091	17.147	24.628	19.480	1.00	12.65
	ATOM	2066	O	PHE	1091	16.337	25.431	19.927	1.00	13.66
	ATOM	2067	N	GLY	1092	16.907	24.018	18.289	1.00	12.25
	ATOM	2068	H	GLY	1092	17.599	23.430	17.919	1.00	0.00
35	ATOM	2069	CA	GLY	1092	15.647	24.277	17.532	1.00	8.94
	ATOM	2070	C	GLY	1092	14.447	23.836	18.396	1.00	9.76
	ATOM	2071	O	GLY	1092	13.402	24.460	18.425	1.00	9.81
	ATOM	2072	N	VAL	1093	14.515	22.728	19.142	1.00	8.43
	ATOM	2073	H	VAL	1093	15.338	22.211	19.080	1.00	0.00
40	ATOM	2074	CA	VAL	1093	13.413	22.278	20.019	1.00	9.72
	ATOM	2075	CB	VAL	1093	13.687	20.831	20.600	1.00	11.43
	ATOM	2076	CG1	VAL	1093	12.479	20.419	21.511	1.00	11.16
	ATOM	2077	CG2	VAL	1093	13.891	19.813	19.454	1.00	9.81
	ATOM	2078	C	VAL	1093	13.264	23.285	21.163	1.00	9.28
45	ATOM	2079	O	VAL	1093	12.153	23.612	21.551	1.00	9.97
	ATOM	2080	N	LEU	1094	14.350	23.820	21.756	1.00	10.99
	ATOM	2081	H	LEU	1094	15.216	23.494	21.438	1.00	0.00
	ATOM	2082	CA	LEU	1094	14.302	24.850	22.808	1.00	11.18
	ATOM	2083	CB	LEU	1094	15.718	25.270	23.170	1.00	10.45
50	ATOM	2084	CG	LEU	1094	16.043	25.960	24.520	1.00	17.69
	ATOM	2085	CD1	LEU	1094	16.927	27.067	24.060	1.00	14.34
	ATOM	2086	CD2	LEU	1094	14.901	26.542	25.385	1.00	16.32
	ATOM	2087	C	LEU	1094	13.542	26.092	22.261	1.00	10.70
	ATOM	2088	O	LEU	1094	12.690	26.653	22.961	1.00	10.69
55	ATOM	2089	N	LEU	1095	13.844	26.550	21.024	1.00	11.07
	ATOM	2090	H	LEU	1095	14.612	26.142	20.568	1.00	0.00
	ATOM	2091	CA	LEU	1095	13.139	27.667	20.390	1.00	12.09
	ATOM	2092	CB	LEU	1095	13.555	27.898	18.937	1.00	10.35
	ATOM	2093	CG	LEU	1095	14.976	28.409	18.782	1.00	14.19
60	ATOM	2094	CD1	LEU	1095	15.276	28.524	17.284	1.00	14.00
	ATOM	2095	CD2	LEU	1095	15.170	29.752	19.501	1.00	11.15
	ATOM	2096	C	LEU	1095	11.649	27.368	20.359	1.00	11.89

	ATOM	2097	O	LEU	1095	10.822	28.228	20.675	1.00	12.46
	ATOM	2098	N	TRP	1096	11.249	26.136	20.004	1.00	12.06
	ATOM	2099	H	TRP	1096	11.922	25.475	19.735	1.00	0.00
5	ATOM	2100	CA	TRP	1096	9.811	25.781	19.983	1.00	11.39
	ATOM	2101	CB	TRP	1096	9.644	24.334	19.413	1.00	10.42
	ATOM	2102	CG	TRP	1096	8.206	23.958	19.183	1.00	11.06
	ATOM	2103	CD2	TRP	1096	7.293	23.494	20.165	1.00	11.17
	ATOM	2104	CE2	TRP	1096	6.014	23.350	19.497	1.00	12.85
	ATOM	2105	CE3	TRP	1096	7.446	23.166	21.547	1.00	10.95
10	ATOM	2106	CD1	TRP	1096	7.451	24.053	17.960	1.00	10.79
	ATOM	2107	NE1	TRP	1096	6.145	23.697	18.152	1.00	10.37
	ATOM	2108	HE1	TRP	1096	5.475	23.694	17.430	1.00	0.00
	ATOM	2109	CZ2	TRP	1096	4.930	22.872	20.276	1.00	14.26
	ATOM	2110	CZ3	TRP	1096	6.351	22.740	22.282	1.00	10.09
15	ATOM	2111	CH2	TRP	1096	5.093	22.596	21.659	1.00	12.72
	ATOM	2112	C	TRP	1096	9.259	25.893	21.412	1.00	12.97
	ATOM	2113	O	TRP	1096	8.157	26.420	21.626	1.00	12.73
	ATOM	2114	N	GLU	1097	10.026	25.428	22.428	1.00	11.49
	ATOM	2115	H	GLU	1097	10.872	24.984	22.217	1.00	0.00
20	ATOM	2116	CA	GLU	1097	9.559	25.567	23.818	1.00	10.93
	ATOM	2117	CB	GLU	1097	10.526	24.928	24.875	1.00	11.19
	ATOM	2118	CG	GLU	1097	10.633	23.443	24.681	1.00	11.79
	ATOM	2119	CD	GLU	1097	11.621	22.931	25.735	1.00	14.75
	ATOM	2120	OE1	GLU	1097	11.163	22.552	26.821	1.00	14.16
25	ATOM	2121	OE2	GLU	1097	12.825	22.920	25.463	1.00	11.18
	ATOM	2122	C	GLU	1097	9.435	27.038	24.197	1.00	10.76
	ATOM	2123	O	GLU	1097	8.506	27.410	24.902	1.00	7.86
	ATOM	2124	N	ILE	1098	10.353	27.907	23.750	1.00	9.23
	ATOM	2125	H	ILE	1098	11.097	27.577	23.213	1.00	0.00
30	ATOM	2126	CA	ILE	1098	10.252	29.308	24.094	1.00	9.97
	ATOM	2127	CB	ILE	1098	11.534	30.070	23.707	1.00	9.65
	ATOM	2128	CG2	ILE	1098	11.296	31.598	23.822	1.00	10.81
	ATOM	2129	CG1	ILE	1098	12.686	29.665	24.650	1.00	9.86
	ATOM	2130	CD1	ILE	1098	14.037	30.272	24.152	1.00	8.28
35	ATOM	2131	C	ILE	1098	9.070	29.934	23.418	1.00	12.80
	ATOM	2132	O	ILE	1098	8.259	30.590	24.095	1.00	11.90
	ATOM	2133	N	PHE	1099	8.920	29.742	22.104	1.00	12.73
	ATOM	2134	H	PHE	1099	9.598	29.209	21.639	1.00	0.00
	ATOM	2135	CA	PHE	1099	7.809	30.354	21.394	1.00	12.90
40	ATOM	2136	CB	PHE	1099	8.174	30.545	19.934	1.00	13.94
	ATOM	2137	CG	PHE	1099	9.233	31.575	19.939	1.00	14.10
	ATOM	2138	CD1	PHE	1099	10.606	31.219	20.094	1.00	12.81
	ATOM	2139	CD2	PHE	1099	8.866	32.932	19.781	1.00	16.55
	ATOM	2140	CE1	PHE	1099	11.603	32.210	20.124	1.00	13.19
45	ATOM	2141	CE2	PHE	1099	9.872	33.926	19.801	1.00	14.99
	ATOM	2142	CZ	PHE	1099	11.246	33.567	19.974	1.00	15.28
	ATOM	2143	C	PHE	1099	6.467	29.664	21.538	1.00	13.75
	ATOM	2144	O	PHE	1099	5.487	30.025	20.885	1.00	12.75
	ATOM	2145	N	SER	1100	6.391	28.645	22.373	1.00	12.62
50	ATOM	2146	H	SER	1100	7.227	28.264	22.736	1.00	0.00
	ATOM	2147	CA	SER	1100	5.115	27.971	22.742	1.00	13.99
	ATOM	2148	CB	SER	1100	5.176	26.428	22.720	1.00	15.12
	ATOM	2149	OG	SER	1100	6.075	25.929	23.740	1.00	14.11
	ATOM	2150	HG	SER	1100	6.151	24.975	23.640	1.00	0.00
55	ATOM	2151	C	SER	1100	4.825	28.342	24.208	1.00	14.39
	ATOM	2152	O	SER	1100	3.809	27.961	24.793	1.00	13.50
	ATOM	2153	N	LEU	1101	5.676	29.213	24.807	1.00	14.61
	ATOM	2154	H	LEU	1101	6.342	29.645	24.242	1.00	0.00
	ATOM	2155	CA	LEU	1101	5.661	29.619	26.232	1.00	12.80
60	ATOM	2156	CB	LEU	1101	4.493	30.566	26.581	1.00	11.12
	ATOM	2157	CG	LEU	1101	4.693	31.977	26.024	1.00	12.01
	ATOM	2158	CD1	LEU	1101	3.442	32.786	26.490	1.00	13.55



	ATOM	2159	CD2	LEU	1101	6.045	32.630	26.498	1.00	10.11
	ATOM	2160	C	LEU	1101	5.603	28.423	27.197	1.00	12.17
	ATOM	2161	O	LEU	1101	4.754	28.178	28.030	1.00	11.67
	ATOM	2162	N	GLY	1102	6.602	27.592	27.054	1.00	13.34
5	ATOM	2163	H	GLY	1102	7.228	27.755	26.324	1.00	0.00
	ATOM	2164	CA	GLY	1102	6.820	26.428	27.917	1.00	14.92
	ATOM	2165	C	GLY	1102	6.013	25.202	27.657	1.00	14.24
	ATOM	2166	O	GLY	1102	5.810	24.373	28.546	1.00	11.85
	ATOM	2167	N	ALA	1103	5.506	25.067	26.456	1.00	14.14
10	ATOM	2168	H	ALA	1103	5.652	25.769	25.788	1.00	0.00
	ATOM	2169	CA	ALA	1103	4.726	23.846	26.176	1.00	14.65
	ATOM	2170	CB	ALA	1103	3.836	23.980	24.885	1.00	12.07
	ATOM	2171	C	ALA	1103	5.635	22.609	25.995	1.00	15.57
	ATOM	2172	O	ALA	1103	6.839	22.679	25.749	1.00	14.22
15	ATOM	2173	N	SER	1104	5.054	21.408	26.118	1.00	15.92
	ATOM	2174	H	SER	1104	4.091	21.410	26.273	1.00	0.00
	ATOM	2175	CA	SER	1104	5.821	20.151	25.928	1.00	16.84
	ATOM	2176	CB	SER	1104	5.097	19.000	26.670	1.00	16.32
	ATOM	2177	OG	SER	1104	5.789	17.779	26.487	1.00	19.58
20	ATOM	2178	HG	SER	1104	5.335	17.084	26.978	1.00	0.00
	ATOM	2179	C	SER	1104	5.931	19.837	24.423	1.00	14.24
	ATOM	2180	O	SER	1104	4.902	19.805	23.732	1.00	13.86
	ATOM	2181	N	PRO	1105	7.135	19.605	23.895	1.00	13.01
	ATOM	2182	CD	PRO	1105	8.447	19.673	24.575	1.00	10.32
25	ATOM	2183	CA	PRO	1105	7.279	19.286	22.489	1.00	13.27
	ATOM	2184	CB	PRO	1105	8.791	19.030	22.362	1.00	10.09
	ATOM	2185	CG	PRO	1105	9.354	19.988	23.400	1.00	9.47
	ATOM	2186	C	PRO	1105	6.376	18.112	22.010	1.00	16.99
	ATOM	2187	O	PRO	1105	5.923	17.238	22.763	1.00	17.21
30	ATOM	2188	N	TYR	1106	6.183	18.037	20.691	1.00	18.28
	ATOM	2189	H	TYR	1106	6.572	18.758	20.161	1.00	0.00
	ATOM	2190	CA	TYR	1106	5.360	16.997	19.992	1.00	18.30
	ATOM	2191	CB	TYR	1106	6.177	15.703	19.924	1.00	15.36
	ATOM	2192	CG	TYR	1106	7.395	15.970	19.146	1.00	15.64
35	ATOM	2193	CD1	TYR	1106	8.616	16.261	19.787	1.00	13.80
	ATOM	2194	CE1	TYR	1106	9.748	16.540	19.014	1.00	16.07
	ATOM	2195	CD2	TYR	1106	7.338	15.903	17.745	1.00	15.68
	ATOM	2196	CE2	TYR	1106	8.484	16.195	16.979	1.00	15.32
	ATOM	2197	CZ	TYR	1106	9.700	16.489	17.599	1.00	14.65
40	ATOM	2198	OH	TYR	1106	10.822	16.769	16.820	1.00	14.04
	ATOM	2199	HH	TYR	1106	10.572	16.749	15.887	1.00	0.00
	ATOM	2200	C	TYR	1106	4.023	16.776	20.693	1.00	19.15
	ATOM	2201	O	TYR	1106	3.778	15.691	21.220	1.00	19.05
	ATOM	2202	N	PRO	1107	3.170	17.842	20.806	1.00	19.33
45	ATOM	2203	CD	PRO	1107	3.342	19.260	20.347	1.00	18.88
	ATOM	2204	CA	PRO	1107	1.877	17.700	21.469	1.00	20.66
	ATOM	2205	CB	PRO	1107	1.158	19.013	21.199	1.00	19.22
	ATOM	2206	CG	PRO	1107	1.924	19.723	20.088	1.00	18.99
	ATOM	2207	C	PRO	1107	1.075	16.498	20.968	1.00	24.32
50	ATOM	2208	O	PRO	1107	0.818	16.349	19.769	1.00	22.35
	ATOM	2209	N	GLY	1108	0.765	15.607	21.914	1.00	28.77
	ATOM	2210	H	GLY	1108	1.129	15.799	22.805	1.00	0.00
	ATOM	2211	CA	GLY	1108	-0.024	14.360	21.693	1.00	33.25
	ATOM	2212	C	GLY	1108	0.672	13.097	21.104	1.00	36.31
55	ATOM	2213	O	GLY	1108	0.130	11.986	21.158	1.00	39.74
	ATOM	2214	N	VAL	1109	1.851	13.239	20.474	1.00	36.02
	ATOM	2215	H	VAL	1109	2.260	14.132	20.519	1.00	0.00
	ATOM	2216	CA	VAL	1109	2.588	12.123	19.880	1.00	32.35
	ATOM	2217	CB	VAL	1109	3.693	12.732	18.985	1.00	32.87
60	ATOM	2218	CG1	VAL	1109	4.233	11.666	18.065	1.00	35.32
	ATOM	2219	CG2	VAL	1109	3.160	13.828	18.042	1.00	33.33
	ATOM	2220	C	VAL	1109	3.175	11.205	20.968	1.00	32.29

	ATOM	2221	O	VAL	1109	3.744	11.635	21.974	1.00	32.53
	ATOM	2222	N	LYS	1110	2.950	9.898	20.894	1.00	31.68
	ATOM	2223	H	LYS	1110	2.341	9.563	20.205	1.00	0.00
	ATOM	2224	CA	LYS	1110	3.591	8.997	21.877	1.00	30.41
5	ATOM	2225	CB	LYS	1110	2.917	7.576	21.918	1.00	31.54
	ATOM	2226	C	LYS	1110	5.041	8.869	21.380	1.00	28.64
	ATOM	2227	O	LYS	1110	5.356	8.802	20.192	1.00	28.75
	ATOM	2228	N	ILE	1111	5.996	8.921	22.254	1.00	28.70
	ATOM	2229	H	ILE	1111	5.768	9.129	23.174	1.00	0.00
10	ATOM	2230	CA	ILE	1111	7.395	8.828	21.846	1.00	29.16
	ATOM	2231	CB	ILE	1111	8.250	9.717	22.838	1.00	24.49
	ATOM	2232	CG2	ILE	1111	9.775	9.686	22.534	1.00	21.75
	ATOM	2233	CG1	ILE	1111	7.646	11.155	22.753	1.00	20.94
	ATOM	2234	CD1	ILE	1111	7.380	11.824	21.387	1.00	17.72
15	ATOM	2235	C	ILE	1111	7.760	7.363	21.805	1.00	31.83
	ATOM	2236	O	ILE	1111	7.996	6.677	22.813	1.00	34.10
	ATOM	2237	N	ASP	1112	7.706	6.894	20.576	1.00	31.82
	ATOM	2238	H	ASP	1112	7.451	7.520	19.872	1.00	0.00
	ATOM	2239	CA	ASP	1112	7.996	5.494	20.285	1.00	33.27
20	ATOM	2240	CB	ASP	1112	6.652	4.710	20.243	1.00	33.97
	ATOM	2241	CG	ASP	1112	5.739	5.076	19.078	1.00	34.59
	ATOM	2242	OD1	ASP	1112	4.574	4.705	19.153	1.00	38.39
	ATOM	2243	OD2	ASP	1112	6.151	5.700	18.110	1.00	32.54
	ATOM	2244	C	ASP	1112	8.758	5.277	18.994	1.00	34.44
25	ATOM	2245	O	ASP	1112	9.287	6.214	18.406	1.00	34.30
	ATOM	2246	N	GLU	1113	8.749	4.035	18.482	1.00	35.64
	ATOM	2247	H	GLU	1113	8.339	3.325	19.012	1.00	0.00
	ATOM	2248	CA	GLU	1113	9.443	3.674	17.244	1.00	34.77
	ATOM	2249	CB	GLU	1113	9.370	2.120	17.041	1.00	38.24
30	ATOM	2250	C	GLU	1113	8.829	4.414	16.068	1.00	35.32
	ATOM	2251	O	GLU	1113	9.524	4.924	15.184	1.00	36.50
	ATOM	2252	N	GLU	1114	7.514	4.520	16.020	1.00	34.70
	ATOM	2253	H	GLU	1114	6.971	4.058	16.683	1.00	0.00
	ATOM	2254	CA	GLU	1114	6.899	5.293	14.908	1.00	34.92
35	ATOM	2255	CB	GLU	1114	5.368	5.169	15.052	1.00	39.25
	ATOM	2256	CG	GLU	1114	5.108	3.694	14.636	1.00	46.99
	ATOM	2257	CD	GLU	1114	5.688	3.448	13.212	1.00	52.05
	ATOM	2258	OE1	GLU	1114	6.786	2.852	13.089	1.00	55.29
	ATOM	2259	OE2	GLU	1114	5.029	3.881	12.245	1.00	53.93
40	ATOM	2260	C	GLU	1114	7.354	6.728	14.900	1.00	31.33
	ATOM	2261	O	GLU	1114	7.778	7.265	13.883	1.00	30.77
	ATOM	2262	N	PHE	1115	7.355	7.357	16.068	1.00	30.17
	ATOM	2263	H	PHE	1115	6.973	6.910	16.832	1.00	0.00
	ATOM	2264	CA	PHE	1115	7.813	8.742	16.205	1.00	26.65
45	ATOM	2265	CB	PHE	1115	7.640	9.143	17.687	1.00	27.82
	ATOM	2266	CG	PHE	1115	8.561	10.254	18.034	1.00	28.06
	ATOM	2267	CD1	PHE	1115	9.789	9.964	18.635	1.00	26.19
	ATOM	2268	CD2	PHE	1115	8.236	11.599	17.726	1.00	28.22
	ATOM	2269	CE1	PHE	1115	10.695	11.015	18.905	1.00	28.74
50	ATOM	2270	CE2	PHE	1115	9.158	12.641	18.002	1.00	25.90
	ATOM	2271	CZ	PHE	1115	10.391	12.348	18.588	1.00	25.10
	ATOM	2272	C	PHE	1115	9.249	8.831	15.723	1.00	25.32
	ATOM	2273	O	PHE	1115	9.550	9.638	14.845	1.00	23.89
	ATOM	2274	N	CYS	1116	10.149	7.978	16.204	1.00	25.83
55	ATOM	2275	H	CYS	1116	9.879	7.344	16.900	1.00	0.00
	ATOM	2276	CA	CYS	1116	11.556	8.041	15.751	1.00	28.80
	ATOM	2277	CB	CYS	1116	12.394	7.010	16.520	1.00	28.75
	ATOM	2278	SG	CYS	1116	12.645	7.395	18.267	1.00	30.36
	ATOM	2279	C	CYS	1116	11.666	7.799	14.230	1.00	30.80
60	ATOM	2280	O	CYS	1116	12.449	8.417	13.474	1.00	28.85
	ATOM	2281	N	ARG	1117	10.783	6.924	13.730	1.00	33.67
	ATOM	2282	H	ARG	1117	10.146	6.493	14.330	1.00	0.00

	ATOM	2283	CA	ARG	1117	10.771	6.621	12.295	1.00	35.49
	ATOM	2284	CB	ARG	1117	9.774	5.503	12.045	1.00	39.95
	ATOM	2285	CG	ARG	1117	9.836	4.992	10.599	1.00	46.19
	ATOM	2286	CD	ARG	1117	8.574	4.140	10.206	1.00	47.85
5	ATOM	2287	NE	ARG	1117	7.558	4.875	9.393	1.00	48.96
	ATOM	2288	HE	ARG	1117	7.559	4.756	8.421	1.00	0.00
	ATOM	2289	CZ	ARG	1117	6.615	5.654	9.934	1.00	50.65
	ATOM	2290	NH1	ARG	1117	5.708	6.285	9.165	1.00	50.95
	ATOM	2291	HH11	ARG	1117	5.720	6.166	8.172	1.00	0.00
10	ATOM	2292	HH12	ARG	1117	5.010	6.859	9.596	1.00	0.00
	ATOM	2293	NH2	ARG	1117	6.588	5.816	11.266	1.00	54.46
	ATOM	2294	HH21	ARG	1117	7.270	5.367	11.844	1.00	0.00
	ATOM	2295	HH22	ARG	1117	5.885	6.384	11.694	1.00	0.00
	ATOM	2296	C	ARG	1117	10.377	7.860	11.512	1.00	34.51
15	ATOM	2297	O	ARG	1117	11.119	8.316	10.641	1.00	35.21
	ATOM	2298	N	ARG	1118	9.236	8.470	11.845	1.00	33.52
	ATOM	2299	H	ARG	1118	8.718	8.075	12.569	1.00	0.00
	ATOM	2300	CA	ARG	1118	8.730	9.686	11.168	1.00	33.81
	ATOM	2301	CB	ARG	1118	7.454	10.049	11.863	1.00	35.55
20	ATOM	2302	CG	ARG	1118	6.330	9.252	11.181	1.00	42.27
	ATOM	2303	CD	ARG	1118	5.222	8.813	12.162	1.00	47.82
	ATOM	2304	NE	ARG	1118	4.968	9.973	13.022	1.00	54.00
	ATOM	2305	HE	ARG	1118	4.938	10.845	12.584	1.00	0.00
	ATOM	2306	CZ	ARG	1118	4.733	9.947	14.345	1.00	53.99
25	ATOM	2307	NH1	ARG	1118	4.561	11.142	14.906	1.00	56.57
	ATOM	2308	HH11	ARG	1118	4.615	11.962	14.339	1.00	0.00
	ATOM	2309	HH12	ARG	1118	4.383	11.201	15.884	1.00	0.00
	ATOM	2310	NH2	ARG	1118	4.609	8.840	15.083	1.00	53.66
	ATOM	2311	HH21	ARG	1118	4.681	7.932	14.666	1.00	0.00
30	ATOM	2312	HH22	ARG	1118	4.443	8.923	16.062	1.00	0.00
	ATOM	2313	C	ARG	1118	9.713	10.851	11.147	1.00	32.88
	ATOM	2314	O	ARG	1118	9.930	11.566	10.166	1.00	30.09
	ATOM	2315	N	LEU	1119	10.345	11.039	12.290	1.00	32.67
	ATOM	2316	H	LEU	1119	10.127	10.447	13.039	1.00	0.00
35	ATOM	2317	CA	LEU	1119	11.364	12.090	12.425	1.00	32.13
	ATOM	2318	CB	LEU	1119	11.988	12.013	13.776	1.00	31.96
	ATOM	2319	CG	LEU	1119	12.412	13.362	14.257	1.00	33.97
	ATOM	2320	CD1	LEU	1119	11.121	14.143	14.699	1.00	34.08
	ATOM	2321	CD2	LEU	1119	13.520	13.155	15.338	1.00	35.42
40	ATOM	2322	C	LEU	1119	12.464	11.857	11.398	1.00	31.07
	ATOM	2323	O	LEU	1119	12.924	12.769	10.718	1.00	29.19
	ATOM	2324	N	LYS	1120	12.970	10.617	11.323	1.00	33.38
	ATOM	2325	H	LYS	1120	12.638	9.907	11.921	1.00	0.00
	ATOM	2326	CA	LYS	1120	14.028	10.339	10.319	1.00	35.07
45	ATOM	2327	CB	LYS	1120	14.531	8.874	10.434	1.00	36.62
	ATOM	2328	CG	LYS	1120	15.946	8.709	9.846	1.00	39.11
	ATOM	2329	CD	LYS	1120	16.657	7.343	10.127	1.00	43.55
	ATOM	2330	CE	LYS	1120	18.212	7.379	9.780	1.00	47.43
	ATOM	2331	NZ	LYS	1120	19.097	6.574	10.677	1.00	43.59
50	ATOM	2332	HZ1	LYS	1120	18.669	5.633	10.801	1.00	0.00
	ATOM	2333	HZ2	LYS	1120	19.154	7.043	11.603	1.00	0.00
	ATOM	2334	HZ3	LYS	1120	20.045	6.477	10.265	1.00	0.00
	ATOM	2335	C	LYS	1120	13.426	10.583	8.937	1.00	34.22
	ATOM	2336	O	LYS	1120	14.123	11.042	8.040	1.00	33.35
55	ATOM	2337	N	GLU	1121	12.132	10.311	8.718	1.00	35.16
	ATOM	2338	H	GLU	1121	11.586	9.945	9.442	1.00	0.00
	ATOM	2339	CA	GLU	1121	11.603	10.578	7.356	1.00	36.89
	ATOM	2340	CB	GLU	1121	10.280	9.806	7.042	1.00	38.47
	ATOM	2341	CG	GLU	1121	9.744	8.757	8.011	1.00	46.53
60	ATOM	2342	CD	GLU	1121	8.303	8.282	7.670	1.00	51.63
	ATOM	2343	OE1	GLU	1121	7.387	9.126	7.551	1.00	51.95
	ATOM	2344	OE2	GLU	1121	8.120	7.052	7.541	1.00	53.65

	ATOM	2345	C	GLU	1121	11.337	12.059	7.007	1.00	35.52
	ATOM	2346	O	GLU	1121	10.960	12.380	5.865	1.00	37.05
	ATOM	2347	N	GLY	1122	11.451	12.975	7.985	1.00	32.29
	ATOM	2348	H	GLY	1122	11.743	12.674	8.873	1.00	0.00
5	ATOM	2349	CA	GLY	1122	11.215	14.420	7.717	1.00	28.66
	ATOM	2350	C	GLY	1122	10.109	15.044	8.578	1.00	26.39
	ATOM	2351	O	GLY	1122	9.845	16.226	8.516	1.00	27.28
	ATOM	2352	N	THR	1123	9.360	14.317	9.392	1.00	26.01
	ATOM	2353	H	THR	1123	9.452	13.351	9.359	1.00	0.00
10	ATOM	2354	CA	THR	1123	8.291	14.903	10.252	1.00	25.55
	ATOM	2355	CB	THR	1123	7.518	13.840	11.029	1.00	24.70
	ATOM	2356	OG1	THR	1123	7.052	12.891	10.098	1.00	30.21
	ATOM	2357	HG1	THR	1123	6.582	12.213	10.583	1.00	0.00
	ATOM	2358	CG2	THR	1123	6.319	14.391	11.802	1.00	24.78
15	ATOM	2359	C	THR	1123	8.913	15.842	11.304	1.00	24.92
	ATOM	2360	O	THR	1123	9.829	15.489	12.061	1.00	22.27
	ATOM	2361	N	ARG	1124	8.308	17.024	11.392	1.00	23.65
	ATOM	2362	H	ARG	1124	7.508	17.096	10.852	1.00	0.00
	ATOM	2363	CA	ARG	1124	8.708	18.125	12.278	1.00	21.21
20	ATOM	2364	CB	ARG	1124	9.364	19.225	11.460	1.00	19.08
	ATOM	2365	CG	ARG	1124	10.623	18.885	10.671	1.00	17.71
	ATOM	2366	CD	ARG	1124	11.682	18.142	11.493	1.00	17.97
	ATOM	2367	NE	ARG	1124	12.912	17.835	10.736	1.00	18.87
	ATOM	2368	HE	ARG	1124	13.484	18.583	10.470	1.00	0.00
25	ATOM	2369	CZ	ARG	1124	13.269	16.596	10.400	1.00	15.76
	ATOM	2370	NH1	ARG	1124	12.529	15.550	10.693	1.00	16.69
	ATOM	2371	HH11	ARG	1124	11.679	15.667	11.201	1.00	0.00
	ATOM	2372	HH12	ARG	1124	12.831	14.640	10.419	1.00	0.00
	ATOM	2373	NH2	ARG	1124	14.419	16.456	9.773	1.00	14.99
30	ATOM	2374	HH21	ARG	1124	14.975	17.260	9.567	1.00	0.00
	ATOM	2375	HH22	ARG	1124	14.733	15.566	9.468	1.00	0.00
	ATOM	2376	C	ARG	1124	7.519	18.752	12.987	1.00	22.80
	ATOM	2377	O	ARG	1124	6.386	18.662	12.471	1.00	24.71
	ATOM	2378	N	MET	1125	7.695	19.442	14.133	1.00	19.50
35	ATOM	2379	H	MET	1125	8.563	19.532	14.548	1.00	0.00
	ATOM	2380	CA	MET	1125	6.565	20.124	14.787	1.00	17.04
	ATOM	2381	CB	MET	1125	6.951	20.707	16.147	1.00	15.53
	ATOM	2382	CG	MET	1125	7.161	19.629	17.197	1.00	16.08
	ATOM	2383	SD	MET	1125	7.525	20.324	18.808	1.00	16.93
40	ATOM	2384	CE	MET	1125	9.326	20.396	18.598	1.00	10.08
	ATOM	2385	C	MET	1125	6.074	21.293	13.957	1.00	16.72
	ATOM	2386	O	MET	1125	6.774	21.845	13.102	1.00	15.05
	ATOM	2387	N	ARG	1126	4.814	21.602	14.214	1.00	20.23
	ATOM	2388	H	ARG	1126	4.280	20.958	14.711	1.00	0.00
45	ATOM	2389	CA	ARG	1126	4.098	22.766	13.615	1.00	24.80
	ATOM	2390	CB	ARG	1126	2.513	22.717	13.801	1.00	27.74
	ATOM	2391	CG	ARG	1126	1.796	22.643	15.270	1.00	40.41
	ATOM	2392	CD	ARG	1126	1.330	23.799	16.352	1.00	44.42
	ATOM	2393	NE	ARG	1126	1.840	23.720	17.788	1.00	44.59
50	ATOM	2394	HE	ARG	1126	2.710	23.301	17.949	1.00	0.00
	ATOM	2395	CZ	ARG	1126	1.173	24.261	18.888	1.00	46.74
	ATOM	2396	NH1	ARG	1126	1.706	24.153	20.125	1.00	41.03
	ATOM	2397	HH11	ARG	1126	2.587	23.698	20.247	1.00	0.00
	ATOM	2398	HH12	ARG	1126	1.224	24.531	20.917	1.00	0.00
55	ATOM	2399	NH2	ARG	1126	-0.043	24.888	18.825	1.00	43.10
	ATOM	2400	HH21	ARG	1126	-0.511	24.980	17.946	1.00	0.00
	ATOM	2401	HH22	ARG	1126	-0.460	25.252	19.658	1.00	0.00
	ATOM	2402	C	ARG	1126	4.573	24.028	14.353	1.00	22.66
	ATOM	2403	O	ARG	1126	5.033	23.957	15.502	1.00	22.72
60	ATOM	2404	N	ALA	1127	4.330	25.184	13.782	1.00	19.86
	ATOM	2405	H	ALA	1127	3.969	25.160	12.873	1.00	0.00
	ATOM	2406	CA	ALA	1127	4.692	26.452	14.414	1.00	18.73

	ATOM	2407	CB	ALA	1127	4.156	27.642	13.599	1.00	18.79
	ATOM	2408	C	ALA	1127	4.085	26.546	15.788	1.00	17.90
	ATOM	2409	O	ALA	1127	2.890	26.307	15.940	1.00	18.45
	ATOM	2410	N	PRO	1128	4.829	26.952	16.813	1.00	17.07
5	ATOM	2411	CD	PRO	1128	6.275	27.183	16.900	1.00	14.67
	ATOM	2412	CA	PRO	1128	4.176	27.199	18.109	1.00	16.71
	ATOM	2413	CB	PRO	1128	5.396	27.204	19.076	1.00	15.26
	ATOM	2414	CG	PRO	1128	6.446	27.901	18.272	1.00	11.48
	ATOM	2415	C	PRO	1128	3.287	28.487	18.063	1.00	14.59
10	ATOM	2416	O	PRO	1128	3.460	29.386	17.248	1.00	12.19
	ATOM	2417	N	ASP	1129	2.383	28.642	19.001	1.00	15.17
	ATOM	2418	H	ASP	1129	2.389	27.997	19.732	1.00	0.00
	ATOM	2419	CA	ASP	1129	1.436	29.785	19.066	1.00	16.31
	ATOM	2420	CB	ASP	1129	0.523	29.688	20.294	1.00	14.33
15	ATOM	2421	CG	ASP	1129	-0.453	28.512	20.137	1.00	15.22
	ATOM	2422	OD1	ASP	1129	-1.038	28.111	21.128	1.00	16.41
	ATOM	2423	OD2	ASP	1129	-0.629	27.952	19.055	1.00	20.01
	ATOM	2424	C	ASP	1129	1.935	31.183	19.032	1.00	16.10
	ATOM	2425	O	ASP	1129	1.279	32.051	18.486	1.00	14.67
20	ATOM	2426	N	TYR	1130	3.096	31.402	19.642	1.00	14.64
	ATOM	2427	H	TYR	1130	3.599	30.639	19.992	1.00	0.00
	ATOM	2428	CA	TYR	1130	3.697	32.749	19.790	1.00	14.41
	ATOM	2429	CB	TYR	1130	4.082	32.905	21.266	1.00	12.13
	ATOM	2430	CG	TYR	1130	3.012	32.420	22.146	1.00	11.66
25	ATOM	2431	CD1	TYR	1130	3.055	31.130	22.724	1.00	13.43
	ATOM	2432	CE1	TYR	1130	2.039	30.713	23.605	1.00	13.95
	ATOM	2433	CD2	TYR	1130	1.969	33.284	22.435	1.00	12.02
	ATOM	2434	CE2	TYR	1130	0.965	32.865	23.306	1.00	13.87
	ATOM	2435	CZ	TYR	1130	0.994	31.602	23.890	1.00	12.14
30	ATOM	2436	OH	TYR	1130	-0.061	31.232	24.710	1.00	14.72
	ATOM	2437	HH	TYR	1130	-0.719	31.929	24.769	1.00	0.00
	ATOM	2438	C	TYR	1130	4.896	33.066	18.902	1.00	15.45
	ATOM	2439	O	TYR	1130	5.588	34.085	19.037	1.00	16.56
	ATOM	2440	N	THR	1131	5.179	32.139	17.997	1.00	15.67
35	ATOM	2441	H	THR	1131	4.550	31.400	17.878	1.00	0.00
	ATOM	2442	CA	THR	1131	6.310	32.322	17.081	1.00	16.24
	ATOM	2443	CB	THR	1131	6.586	31.032	16.257	1.00	18.38
	ATOM	2444	OG1	THR	1131	7.873	31.186	15.656	1.00	19.66
	ATOM	2445	HG1	THR	1131	8.031	30.429	15.084	1.00	0.00
40	ATOM	2446	CG2	THR	1131	5.555	30.777	15.087	1.00	17.32
	ATOM	2447	C	THR	1131	6.118	33.435	16.049	1.00	19.05
	ATOM	2448	O	THR	1131	5.037	33.987	15.832	1.00	17.09
	ATOM	2449	N	THR	1132	7.243	33.856	15.486	1.00	19.47
	ATOM	2450	H	THR	1132	8.082	33.449	15.785	1.00	0.00
45	ATOM	2451	CA	THR	1132	7.218	34.782	14.355	1.00	20.07
	ATOM	2452	CB	THR	1132	8.299	35.793	14.356	1.00	18.50
	ATOM	2453	OG1	THR	1132	9.539	35.079	14.342	1.00	20.30
	ATOM	2454	HG1	THR	1132	10.260	35.692	14.572	1.00	0.00
	ATOM	2455	CG2	THR	1132	8.125	36.760	15.523	1.00	18.43
50	ATOM	2456	C	THR	1132	7.549	33.846	13.177	1.00	20.63
	ATOM	2457	O	THR	1132	8.180	32.789	13.320	1.00	21.49
	ATOM	2458	N	PRO	1133	7.215	34.186	11.948	1.00	22.80
	ATOM	2459	CD	PRO	1133	6.541	35.444	11.481	1.00	24.91
	ATOM	2460	CA	PRO	1133	7.522	33.272	10.803	1.00	21.51
55	ATOM	2461	CB	PRO	1133	7.049	34.040	9.548	1.00	23.91
	ATOM	2462	CG	PRO	1133	6.002	35.022	10.105	1.00	25.43
	ATOM	2463	C	PRO	1133	8.961	32.922	10.709	1.00	16.88
	ATOM	2464	O	PRO	1133	9.371	31.816	10.397	1.00	14.90
	ATOM	2465	N	GLU	1134	9.796	33.927	10.925	1.00	19.41
60	ATOM	2466	H	GLU	1134	9.442	34.817	11.118	1.00	0.00
	ATOM	2467	CA	GLU	1134	11.251	33.653	10.792	1.00	22.25
	ATOM	2468	CB	GLU	1134	12.042	34.978	10.629	1.00	25.85

	ATOM	2469	CG	GLU	1134	11.568	36.278	11.293	1.00	36.01
	ATOM	2470	CD	GLU	1134	10.318	36.945	10.696	1.00	38.07
	ATOM	2471	OE1	GLU	1134	9.423	37.361	11.432	1.00	40.95
	ATOM	2472	OE2	GLU	1134	10.251	37.087	9.487	1.00	42.46
5	ATOM	2473	C	GLU	1134	11.784	32.825	11.931	1.00	20.02
	ATOM	2474	O	GLU	1134	12.721	32.040	11.784	1.00	19.02
	ATOM	2475	N	MET	1135	11.158	32.970	13.101	1.00	19.15
	ATOM	2476	H	MET	1135	10.395	33.575	13.223	1.00	0.00
	ATOM	2477	CA	MET	1135	11.603	32.100	14.195	1.00	20.10
10	ATOM	2478	CB	MET	1135	10.963	32.486	15.554	1.00	20.02
	ATOM	2479	CG	MET	1135	11.669	33.690	16.279	1.00	24.47
	ATOM	2480	SD	MET	1135	13.468	33.509	16.579	1.00	25.23
	ATOM	2481	CE	MET	1135	13.458	31.840	16.968	1.00	12.17
	ATOM	2482	C	MET	1135	11.213	30.649	13.829	1.00	18.06
15	ATOM	2483	O	MET	1135	12.023	29.738	14.036	1.00	16.98
	ATOM	2484	N	TYR	1136	9.985	30.388	13.298	1.00	16.13
	ATOM	2485	H	TYR	1136	9.352	31.139	13.207	1.00	0.00
	ATOM	2486	CA	TYR	1136	9.638	29.019	12.897	1.00	15.52
	ATOM	2487	CB	TYR	1136	8.165	29.002	12.444	1.00	16.13
20	ATOM	2488	CG	TYR	1136	7.848	27.570	12.212	1.00	17.93
	ATOM	2489	CD1	TYR	1136	8.015	26.574	13.193	1.00	18.11
	ATOM	2490	CE1	TYR	1136	7.662	25.229	12.931	1.00	16.48
	ATOM	2491	CD2	TYR	1136	7.326	27.198	10.955	1.00	19.38
	ATOM	2492	CE2	TYR	1136	6.971	25.860	10.705	1.00	17.31
25	ATOM	2493	CZ	TYR	1136	7.139	24.877	11.678	1.00	18.42
	ATOM	2494	OH	TYR	1136	6.751	23.597	11.363	1.00	18.68
	ATOM	2495	HH	TYR	1136	6.419	23.638	10.458	1.00	0.00
	ATOM	2496	C	TYR	1136	10.591	28.453	11.799	1.00	16.25
	ATOM	2497	O	TYR	1136	11.008	27.298	11.772	1.00	15.52
30	ATOM	2498	N	GLN	1137	10.995	29.244	10.840	1.00	16.78
	ATOM	2499	H	GLN	1137	10.617	30.149	10.786	1.00	0.00
	ATOM	2500	CA	GLN	1137	11.929	28.734	9.830	1.00	18.33
	ATOM	2501	CB	GLN	1137	12.050	29.768	8.669	1.00	20.85
	ATOM	2502	CG	GLN	1137	13.014	29.300	7.521	1.00	22.56
35	ATOM	2503	CD	GLN	1137	12.508	27.975	6.970	1.00	23.45
	ATOM	2504	OE1	GLN	1137	11.323	27.895	6.611	1.00	22.38
	ATOM	2505	NE2	GLN	1137	13.318	26.908	6.954	1.00	18.71
	ATOM	2506	HE21	GLN	1137	14.218	26.994	7.296	1.00	0.00
	ATOM	2507	HE22	GLN	1137	12.983	26.056	6.592	1.00	0.00
40	ATOM	2508	C	GLN	1137	13.287	28.453	10.469	1.00	15.66
	ATOM	2509	O	GLN	1137	14.026	27.602	10.011	1.00	14.23
	ATOM	2510	N	THR	1138	13.675	29.222	11.472	1.00	14.73
	ATOM	2511	H	THR	1138	13.136	30.003	11.705	1.00	0.00
	ATOM	2512	CA	THR	1138	14.944	28.975	12.151	1.00	15.71
45	ATOM	2513	CB	THR	1138	15.224	30.173	13.131	1.00	15.63
	ATOM	2514	OG1	THR	1138	15.435	31.348	12.319	1.00	17.48
	ATOM	2515	HG1	THR	1138	15.547	32.100	12.913	1.00	0.00
	ATOM	2516	CG2	THR	1138	16.428	29.906	14.072	1.00	13.26
	ATOM	2517	C	THR	1138	14.819	27.625	12.867	1.00	15.46
50	ATOM	2518	O	THR	1138	15.753	26.808	12.815	1.00	18.78
	ATOM	2519	N	MET	1139	13.684	27.320	13.492	1.00	14.16
	ATOM	2520	H	MET	1139	12.993	28.015	13.563	1.00	0.00
	ATOM	2521	CA	MET	1139	13.466	26.026	14.119	1.00	12.32
	ATOM	2522	CB	MET	1139	12.083	25.928	14.674	1.00	10.25
55	ATOM	2523	CG	MET	1139	11.885	26.841	15.835	1.00	10.46
	ATOM	2524	SD	MET	1139	10.152	26.772	16.313	1.00	13.10
	ATOM	2525	CE	MET	1139	9.943	28.438	16.985	1.00	8.95
	ATOM	2526	C	MET	1139	13.616	24.956	13.031	1.00	14.59
	ATOM	2527	O	MET	1139	14.348	23.984	13.151	1.00	15.84
60	ATOM	2528	N	LEU	1140	12.976	25.099	11.864	1.00	16.16
	ATOM	2529	H	LEU	1140	12.378	25.867	11.760	1.00	0.00
	ATOM	2530	CA	LEU	1140	13.102	24.081	10.763	1.00	16.47

	ATOM	2531	CB	LEU	1140	12.145	24.485	9.595	1.00	15.66
	ATOM	2532	CG	LEU	1140	10.628	24.493	9.904	1.00	15.64
	ATOM	2533	CD1	LEU	1140	9.912	24.934	8.609	1.00	18.67
	ATOM	2534	CD2	LEU	1140	10.084	23.111	10.285	1.00	14.82
5	ATOM	2535	C	LEU	1140	14.565	23.940	10.267	1.00	15.15
	ATOM	2536	O	LEU	1140	15.060	22.860	9.965	1.00	15.22
	ATOM	2537	N	ASP	1141	15.331	25.031	10.184	1.00	15.81
	ATOM	2538	H	ASP	1141	14.910	25.883	10.415	1.00	0.00
	ATOM	2539	CA	ASP	1141	16.725	24.983	9.775	1.00	16.12
10	ATOM	2540	CB	ASP	1141	17.321	26.397	9.851	1.00	17.34
	ATOM	2541	CG	ASP	1141	16.749	27.354	8.768	1.00	20.41
	ATOM	2542	OD1	ASP	1141	16.948	28.579	8.933	1.00	20.82
	ATOM	2543	OD2	ASP	1141	16.127	26.945	7.808	1.00	18.82
	ATOM	2544	C	ASP	1141	17.504	24.075	10.719	1.00	18.57
15	ATOM	2545	O	ASP	1141	18.304	23.218	10.313	1.00	17.72
	ATOM	2546	N	CYS	1142	17.301	24.343	12.035	1.00	17.65
	ATOM	2547	H	CYS	1142	16.710	25.097	12.274	1.00	0.00
	ATOM	2548	CA	CYS	1142	17.942	23.591	13.141	1.00	16.33
	ATOM	2549	CB	CYS	1142	17.513	24.167	14.528	1.00	16.51
20	ATOM	2550	SG	CYS	1142	18.105	25.841	14.909	1.00	16.45
	ATOM	2551	C	CYS	1142	17.554	22.150	13.075	1.00	16.22
	ATOM	2552	O	CYS	1142	18.244	21.244	13.527	1.00	15.60
	ATOM	2553	N	TRP	1143	16.377	21.885	12.548	1.00	16.70
	ATOM	2554	H	TRP	1143	15.773	22.612	12.309	1.00	0.00
25	ATOM	2555	CA	TRP	1143	15.970	20.489	12.424	1.00	16.43
	ATOM	2556	CB	TRP	1143	14.448	20.343	12.711	1.00	17.60
	ATOM	2557	CG	TRP	1143	14.079	20.811	14.078	1.00	18.53
	ATOM	2558	CD2	TRP	1143	12.832	21.378	14.459	1.00	17.80
	ATOM	2559	CE2	TRP	1143	12.898	21.625	15.872	1.00	17.11
30	ATOM	2560	CE3	TRP	1143	11.667	21.697	13.738	1.00	16.79
	ATOM	2561	CD1	TRP	1143	14.838	20.746	15.267	1.00	15.72
	ATOM	2562	NE1	TRP	1143	14.130	21.224	16.326	1.00	17.15
	ATOM	2563	HE1	TRP	1143	14.455	21.220	17.252	1.00	0.00
	ATOM	2564	CZ2	TRP	1143	11.790	22.194	16.517	1.00	14.44
35	ATOM	2565	CZ3	TRP	1143	10.573	22.264	14.413	1.00	15.84
	ATOM	2566	CH2	TRP	1143	10.631	22.513	15.797	1.00	14.32
	ATOM	2567	C	TRP	1143	16.299	19.868	11.038	1.00	17.99
	ATOM	2568	O	TRP	1143	15.707	18.903	10.563	1.00	18.02
	ATOM	2569	N	HIS	1144	17.235	20.433	10.335	1.00	16.73
40	ATOM	2570	H	HIS	1144	17.700	21.205	10.709	1.00	0.00
	ATOM	2571	CA	HIS	1144	17.646	19.876	9.072	1.00	19.64
	ATOM	2572	C	HIS	1144	18.089	18.401	9.270	1.00	21.67
	ATOM	2573	O	HIS	1144	18.879	18.085	10.173	1.00	21.94
	ATOM	2574	CB	HIS	1144	18.793	20.716	8.592	1.00	20.08
45	ATOM	2575	CG	HIS	1144	19.041	20.320	7.232	1.00	23.50
	ATOM	2576	ND1	HIS	1144	18.642	20.999	6.138	1.00	26.90
	ATOM	2577	HD1	HIS	1144	18.356	21.928	6.119	1.00	0.00
	ATOM	2578	CD2	HIS	1144	19.592	19.141	6.817	1.00	24.64
	ATOM	2579	NE2	HIS	1144	19.513	19.097	5.498	1.00	27.90
50	ATOM	2580	CE1	HIS	1144	18.930	20.249	5.041	1.00	26.03
	ATOM	2581	N	GLY	1145	17.632	17.435	8.439	1.00	22.33
	ATOM	2582	H	GLY	1145	16.976	17.694	7.777	1.00	0.00
	ATOM	2583	CA	GLY	1145	18.047	16.013	8.541	1.00	22.05
	ATOM	2584	C	GLY	1145	19.601	15.890	8.596	1.00	22.81
55	ATOM	2585	O	GLY	1145	20.186	15.117	9.341	1.00	24.78
	ATOM	2586	N	GLU	1146	20.303	16.602	7.743	1.00	24.29
	ATOM	2587	H	GLU	1146	19.803	16.942	6.983	1.00	0.00
	ATOM	2588	CA	GLU	1146	21.755	16.603	7.691	1.00	26.20
	ATOM	2589	CB	GLU	1146	22.118	16.962	6.239	1.00	27.45
60	ATOM	2590	CG	GLU	1146	23.589	16.705	5.923	1.00	36.69
	ATOM	2591	CD	GLU	1146	23.870	15.200	5.892	1.00	41.69
	ATOM	2592	OE1	GLU	1146	23.161	14.509	5.144	1.00	44.54

	ATOM	2593	OE2	GLU	1146	24.779	14.735	6.605	1.00	42.96
	ATOM	2594	C	GLU	1146	22.449	17.527	8.721	1.00	23.48
	ATOM	2595	O	GLU	1146	22.446	18.739	8.594	1.00	22.33
	ATOM	2596	N	PRO	1147	23.204	16.987	9.688	1.00	22.51
5	ATOM	2597	CD	PRO	1147	23.494	15.556	9.888	1.00	21.48
	ATOM	2598	CA	PRO	1147	23.864	17.778	10.738	1.00	21.57
	ATOM	2599	CB	PRO	1147	24.769	16.795	11.495	1.00	18.99
	ATOM	2600	CG	PRO	1147	24.110	15.461	11.276	1.00	20.48
	ATOM	2601	C	PRO	1147	24.648	18.935	10.184	1.00	22.89
10	ATOM	2602	O	PRO	1147	24.603	20.073	10.696	1.00	21.52
	ATOM	2603	N	SER	1148	25.434	18.626	9.113	1.00	24.00
	ATOM	2604	H	SER	1148	25.449	17.700	8.795	1.00	0.00
	ATOM	2605	CA	SER	1148	26.283	19.659	8.474	1.00	24.04
	ATOM	2606	CB	SER	1148	27.250	19.075	7.406	1.00	24.88
15	ATOM	2607	OG	SER	1148	26.505	18.533	6.320	1.00	30.18
	ATOM	2608	HG	SER	1148	27.111	18.140	5.672	1.00	0.00
	ATOM	2609	C	SER	1148	25.460	20.732	7.830	1.00	22.01
	ATOM	2610	O	SER	1148	25.941	21.845	7.695	1.00	23.03
	ATOM	2611	N	GLN	1149	24.226	20.460	7.505	1.00	21.14
20	ATOM	2612	H	GLN	1149	23.917	19.546	7.638	1.00	0.00
	ATOM	2613	CA	GLN	1149	23.337	21.467	6.891	1.00	23.98
	ATOM	2614	CB	GLN	1149	22.449	20.673	5.947	1.00	27.89
	ATOM	2615	CG	GLN	1149	23.244	20.163	4.691	1.00	36.15
	ATOM	2616	CD	GLN	1149	23.193	21.306	3.715	1.00	40.22
25	ATOM	2617	OE1	GLN	1149	22.430	21.298	2.760	1.00	40.87
	ATOM	2618	NE2	GLN	1149	23.878	22.403	3.947	1.00	43.28
	ATOM	2619	HE21	GLN	1149	24.438	22.533	4.728	1.00	0.00
	ATOM	2620	HE22	GLN	1149	23.800	23.112	3.279	1.00	0.00
	ATOM	2621	C	GLN	1149	22.538	22.380	7.859	1.00	23.96
30	ATOM	2622	O	GLN	1149	21.833	23.336	7.474	1.00	23.55
	ATOM	2623	N	ARG	1150	22.538	21.997	9.151	1.00	20.75
	ATOM	2624	H	ARG	1150	22.983	21.157	9.404	1.00	0.00
	ATOM	2625	CA	ARG	1150	21.906	22.836	10.198	1.00	18.29
	ATOM	2626	CB	ARG	1150	21.818	22.098	11.546	1.00	15.51
35	ATOM	2627	CG	ARG	1150	20.988	20.826	11.426	1.00	15.22
	ATOM	2628	CD	ARG	1150	21.030	19.939	12.665	1.00	16.45
	ATOM	2629	NE	ARG	1150	20.388	18.685	12.305	1.00	15.94
	ATOM	2630	HE	ARG	1150	19.665	18.733	11.658	1.00	0.00
	ATOM	2631	CZ	ARG	1150	20.743	17.542	12.893	1.00	18.83
40	ATOM	2632	NH1	ARG	1150	21.682	17.501	13.850	1.00	15.15
	ATOM	2633	HH11	ARG	1150	22.153	18.332	14.134	1.00	0.00
	ATOM	2634	HH12	ARG	1150	21.911	16.637	14.273	1.00	0.00
	ATOM	2635	NH2	ARG	1150	20.250	16.415	12.411	1.00	16.84
	ATOM	2636	HH21	ARG	1150	19.627	16.434	11.629	1.00	0.00
45	ATOM	2637	HH22	ARG	1150	20.494	15.553	12.843	1.00	0.00
	ATOM	2638	C	ARG	1150	22.815	24.069	10.395	1.00	17.42
	ATOM	2639	O	ARG	1150	24.038	24.039	10.145	1.00	17.54
	ATOM	2640	N	PRO	1151	22.255	25.215	10.846	1.00	17.40
	ATOM	2641	CD	PRO	1151	20.830	25.499	11.100	1.00	15.10
50	ATOM	2642	CA	PRO	1151	23.133	26.362	11.130	1.00	16.16
	ATOM	2643	CB	PRO	1151	22.175	27.520	11.465	1.00	14.65
	ATOM	2644	CG	PRO	1151	20.870	26.830	11.842	1.00	13.77
	ATOM	2645	C	PRO	1151	24.135	26.107	12.251	1.00	15.32
	ATOM	2646	O	PRO	1151	23.919	25.249	13.109	1.00	15.46
55	ATOM	2647	N	THR	1152	25.264	26.775	12.258	1.00	14.28
	ATOM	2648	H	THR	1152	25.479	27.400	11.541	1.00	0.00
	ATOM	2649	CA	THR	1152	26.132	26.568	13.406	1.00	14.45
	ATOM	2650	CB	THR	1152	27.577	26.930	13.142	1.00	12.68
	ATOM	2651	OG1	THR	1152	27.565	28.328	12.844	1.00	13.67
60	ATOM	2652	HG1	THR	1152	28.429	28.571	12.502	1.00	0.00
	ATOM	2653	CG2	THR	1152	28.240	26.117	12.041	1.00	12.63
	ATOM	2654	C	THR	1152	25.624	27.568	14.481	1.00	15.37



	ATOM	2655	O	THR	1152	24.851	28.489	14.181	1.00	17.11
	ATOM	2656	N	PHE	1153	26.040	27.491	15.747	1.00	15.05
	ATOM	2657	H	PHE	1153	26.501	26.674	16.036	1.00	0.00
	ATOM	2658	CA	PHE	1153	25.631	28.477	16.787	1.00	15.09
5	ATOM	2659	CB	PHE	1153	26.163	28.086	18.185	1.00	12.47
	ATOM	2660	CG	PHE	1153	25.296	26.997	18.736	1.00	12.30
	ATOM	2661	CD1	PHE	1153	23.948	27.306	19.069	1.00	11.21
	ATOM	2662	CD2	PHE	1153	25.810	25.665	18.901	1.00	11.66
	ATOM	2663	CE1	PHE	1153	23.093	26.300	19.551	1.00	11.06
10	ATOM	2664	CE2	PHE	1153	24.951	24.656	19.396	1.00	11.19
	ATOM	2665	CZ	PHE	1153	23.607	24.983	19.720	1.00	12.62
	ATOM	2666	C	PHE	1153	26.117	29.876	16.445	1.00	14.34
	ATOM	2667	O	PHE	1153	25.472	30.840	16.777	1.00	14.23
	ATOM	2668	N	SER	1154	27.269	30.071	15.823	1.00	13.34
15	ATOM	2669	H	SER	1154	27.863	29.307	15.768	1.00	0.00
	ATOM	2670	CA	SER	1154	27.712	31.434	15.408	1.00	15.09
	ATOM	2671	CB	SER	1154	29.096	31.378	14.785	1.00	14.24
	ATOM	2672	OG	SER	1154	30.011	31.011	15.806	1.00	16.33
	ATOM	2673	HG	SER	1154	30.901	31.092	15.456	1.00	0.00
20	ATOM	2674	C	SER	1154	26.764	32.104	14.388	1.00	13.75
	ATOM	2675	O	SER	1154	26.556	33.316	14.388	1.00	13.78
	ATOM	2676	N	GLU	1155	26.280	31.284	13.436	1.00	15.81
	ATOM	2677	H	GLU	1155	26.604	30.364	13.443	1.00	0.00
	ATOM	2678	CA	GLU	1155	25.281	31.682	12.392	1.00	16.66
25	ATOM	2679	CB	GLU	1155	24.987	30.542	11.377	1.00	15.31
	ATOM	2680	CG	GLU	1155	26.111	30.385	10.369	1.00	22.67
	ATOM	2681	CD	GLU	1155	26.092	29.058	9.587	1.00	28.28
	ATOM	2682	OE1	GLU	1155	27.089	28.667	8.954	1.00	37.04
	ATOM	2683	OE2	GLU	1155	25.098	28.370	9.612	1.00	32.99
30	ATOM	2684	C	GLU	1155	23.969	31.992	13.144	1.00	15.43
	ATOM	2685	O	GLU	1155	23.342	32.994	12.851	1.00	14.63
	ATOM	2686	N	LEU	1156	23.521	31.146	14.122	1.00	13.77
	ATOM	2687	H	LEU	1156	24.025	30.315	14.261	1.00	0.00
	ATOM	2688	CA	LEU	1156	22.317	31.399	14.926	1.00	11.74
35	ATOM	2689	CB	LEU	1156	22.098	30.193	15.887	1.00	10.53
	ATOM	2690	CG	LEU	1156	21.614	28.925	15.173	1.00	7.76
	ATOM	2691	CD1	LEU	1156	21.574	27.666	16.025	1.00	8.88
	ATOM	2692	CD2	LEU	1156	20.200	29.205	14.781	1.00	11.76
	ATOM	2693	C	LEU	1156	22.470	32.730	15.676	1.00	12.55
40	ATOM	2694	O	LEU	1156	21.562	33.552	15.687	1.00	14.12
	ATOM	2695	N	VAL	1157	23.600	33.032	16.313	1.00	12.27
	ATOM	2696	H	VAL	1157	24.292	32.340	16.324	1.00	0.00
	ATOM	2697	CA	VAL	1157	23.871	34.305	17.042	1.00	13.32
	ATOM	2698	CB	VAL	1157	25.301	34.219	17.619	1.00	11.28
45	ATOM	2699	CG1	VAL	1157	25.776	35.623	18.014	1.00	11.96
	ATOM	2700	CG2	VAL	1157	25.305	33.194	18.784	1.00	9.86
	ATOM	2701	C	VAL	1157	23.724	35.493	16.090	1.00	13.67
	ATOM	2702	O	VAL	1157	23.065	36.494	16.345	1.00	12.94
	ATOM	2703	N	GLU	1158	24.328	35.392	14.899	1.00	17.01
50	ATOM	2704	H	GLU	1158	24.916	34.624	14.732	1.00	0.00
	ATOM	2705	CA	GLU	1158	24.192	36.485	13.889	1.00	16.82
	ATOM	2706	CB	GLU	1158	25.073	36.156	12.678	1.00	17.46
	ATOM	2707	CG	GLU	1158	24.934	37.192	11.506	1.00	21.95
	ATOM	2708	CD	GLU	1158	25.904	36.914	10.330	1.00	22.22
55	ATOM	2709	OE1	GLU	1158	26.538	35.851	10.233	1.00	23.80
	ATOM	2710	OE2	GLU	1158	25.998	37.784	9.473	1.00	25.63
	ATOM	2711	C	GLU	1158	22.727	36.668	13.453	1.00	13.72
	ATOM	2712	O	GLU	1158	22.156	37.753	13.527	1.00	15.36
	ATOM	2713	N	HIS	1159	22.083	35.576	13.053	1.00	14.65
60	ATOM	2714	H	HIS	1159	22.549	34.714	13.076	1.00	0.00
	ATOM	2715	CA	HIS	1159	20.679	35.665	12.619	1.00	15.40
	ATOM	2716	C	HIS	1159	19.753	36.144	13.743	1.00	16.31

	ATOM	2717	O	HIS	1159	18.875	37.008	13.594	1.00	15.14
	ATOM	2718	CB	HIS	1159	20.239	34.292	12.118	1.00	15.70
	ATOM	2719	CG	HIS	1159	18.870	34.362	11.578	1.00	21.38
	ATOM	2720	ND1	HIS	1159	17.855	33.518	11.914	1.00	24.49
5	ATOM	2721	HD1	HIS	1159	17.891	32.742	12.508	1.00	0.00
	ATOM	2722	CD2	HIS	1159	18.358	35.214	10.586	1.00	21.73
	ATOM	2723	NE2	HIS	1159	17.056	34.887	10.327	1.00	20.76
	ATOM	2724	CE1	HIS	1159	16.750	33.847	11.143	1.00	23.05
	ATOM	2725	N	LEU	1160	19.908	35.576	14.919	1.00	15.42
10	ATOM	2726	H	LEU	1160	20.546	34.859	15.015	1.00	0.00
	ATOM	2727	CA	LEU	1160	19.072	36.005	16.033	1.00	17.12
	ATOM	2728	CB	LEU	1160	19.254	35.012	17.291	1.00	16.70
	ATOM	2729	CG	LEU	1160	18.563	33.622	17.099	1.00	14.66
	ATOM	2730	CD1	LEU	1160	18.967	32.662	18.209	1.00	14.91
15	ATOM	2731	CD2	LEU	1160	17.047	33.835	17.006	1.00	16.49
	ATOM	2732	C	LEU	1160	19.352	37.473	16.421	1.00	16.50
	ATOM	2733	O	LEU	1160	18.438	38.188	16.861	1.00	15.92
	ATOM	2734	N	GLY	1161	20.601	37.934	16.294	1.00	14.98
	ATOM	2735	H	GLY	1161	21.319	37.313	16.059	1.00	0.00
20	ATOM	2736	CA	GLY	1161	20.912	39.309	16.605	1.00	17.59
	ATOM	2737	C	GLY	1161	20.166	40.210	15.617	1.00	16.95
	ATOM	2738	O	GLY	1161	19.605	41.234	15.975	1.00	17.86
	ATOM	2739	N	ASN	1162	20.111	39.815	14.365	1.00	18.14
	ATOM	2740	H	ASN	1162	20.623	39.014	14.135	1.00	0.00
25	ATOM	2741	CA	ASN	1162	19.365	40.550	13.287	1.00	17.75
	ATOM	2742	CB	ASN	1162	19.473	39.886	11.932	1.00	16.47
	ATOM	2743	CG	ASN	1162	20.898	40.081	11.459	1.00	17.75
	ATOM	2744	OD1	ASN	1162	21.627	41.031	11.827	1.00	18.87
	ATOM	2745	ND2	ASN	1162	21.448	39.230	10.597	1.00	20.67
30	ATOM	2746	HD21	ASN	1162	21.039	38.434	10.212	1.00	0.00
	ATOM	2747	HD22	ASN	1162	22.384	39.458	10.358	1.00	0.00
	ATOM	2748	C	ASN	1162	17.876	40.583	13.582	1.00	19.00
	ATOM	2749	O	ASN	1162	17.164	41.581	13.444	1.00	20.58
	ATOM	2750	N	LEU	1163	17.331	39.419	13.909	1.00	18.57
35	ATOM	2751	H	LEU	1163	17.898	38.623	13.934	1.00	0.00
	ATOM	2752	CA	LEU	1163	15.908	39.324	14.236	1.00	19.25
	ATOM	2753	CB	LEU	1163	15.590	37.852	14.505	1.00	22.44
	ATOM	2754	CG	LEU	1163	14.868	36.976	13.481	1.00	21.63
	ATOM	2755	CD1	LEU	1163	15.377	37.272	12.094	1.00	23.84
40	ATOM	2756	CD2	LEU	1163	15.025	35.508	13.888	1.00	24.24
	ATOM	2757	C	LEU	1163	15.613	40.191	15.453	1.00	22.69
	ATOM	2758	O	LEU	1163	14.567	40.800	15.580	1.00	24.43
	ATOM	2759	N	LEU	1164	16.475	40.248	16.452	1.00	25.66
	ATOM	2760	H	LEU	1164	17.276	39.689	16.404	1.00	0.00
45	ATOM	2761	CA	LEU	1164	16.248	41.105	17.646	1.00	26.60
	ATOM	2762	CB	LEU	1164	17.349	40.797	18.641	1.00	27.36
	ATOM	2763	CG	LEU	1164	17.224	41.257	20.072	1.00	28.08
	ATOM	2764	CD1	LEU	1164	15.843	40.984	20.728	1.00	25.82
	ATOM	2765	CD2	LEU	1164	18.360	40.470	20.784	1.00	30.50
50	ATOM	2766	C	LEU	1164	16.246	42.579	17.264	1.00	29.32
	ATOM	2767	O	LEU	1164	15.390	43.362	17.677	1.00	30.29
	ATOM	2768	N	GLN	1165	17.222	42.940	16.445	1.00	30.62
	ATOM	2769	H	GLN	1165	17.874	42.269	16.170	1.00	0.00
	ATOM	2770	CA	GLN	1165	17.346	44.298	15.964	1.00	33.29
55	ATOM	2771	CB	GLN	1165	18.531	44.311	14.989	1.00	34.21
	ATOM	2772	CG	GLN	1165	19.188	45.698	14.910	1.00	41.96
	ATOM	2773	CD	GLN	1165	18.623	46.807	15.844	1.00	46.67
	ATOM	2774	OE1	GLN	1165	18.720	46.843	17.076	1.00	48.88
	ATOM	2775	NE2	GLN	1165	17.981	47.828	15.297	1.00	47.75
60	ATOM	2776	HE21	GLN	1165	17.852	47.959	14.344	1.00	0.00
	ATOM	2777	HE22	GLN	1165	17.656	48.469	15.960	1.00	0.00
	ATOM	2778	C	GLN	1165	16.021	44.716	15.328	1.00	34.48

	ATOM	2779	O	GLN	1165	15.549	45.835	15.561	1.00	35.45
	ATOM	2780	N	ALA	1166	15.466	43.856	14.462	1.00	35.26
	ATOM	2781	H	ALA	1166	15.890	42.995	14.297	1.00	0.00
	ATOM	2782	CA	ALA	1166	14.140	44.113	13.871	1.00	35.85
5	ATOM	2783	CB	ALA	1166	13.887	43.060	12.755	1.00	33.48
	ATOM	2784	C	ALA	1166	12.803	44.224	14.696	1.00	38.95
	ATOM	2785	O	ALA	1166	12.510	43.591	15.762	1.00	37.54
	ATOM	2786	C01	INH	1	15.467	29.112	41.672	1.00	16.51
	ATOM	2787	C02	INH	1	15.685	27.766	41.350	1.00	15.34
10	ATOM	2788	N03	INH	1	14.655	26.875	41.373	1.00	18.13
	ATOM	2789	C04	INH	1	13.401	27.213	41.702	1.00	19.07
	ATOM	2790	C05	INH	1	13.114	28.553	42.038	1.00	18.86
	ATOM	2791	C06	INH	1	14.162	29.502	42.019	1.00	17.99
	ATOM	2792	C07	INH	1	21.520	24.536	38.589	1.00	12.62
15	ATOM	2793	C08	INH	1	20.160	24.260	38.834	1.00	11.94
	ATOM	2794	C09	INH	1	19.325	25.237	39.427	1.00	15.33
	ATOM	2795	C10	INH	1	19.855	26.515	39.732	1.00	15.23
	ATOM	2796	C11	INH	1	21.243	26.769	39.493	1.00	12.06
	ATOM	2797	C12	INH	1	22.068	25.798	38.917	1.00	13.31
20	ATOM	2798	C13	INH	1	19.352	27.721	40.311	1.00	13.65
	ATOM	2799	N14	INH	1	20.344	28.621	40.400	1.00	11.82
	ATOM	2800	N15	INH	1	21.499	28.029	39.877	1.00	11.69
	ATOM	2801	C16	INH	1	17.995	28.165	40.726	1.00	11.01
	ATOM	2802	C17	INH	1	16.993	27.309	40.792	1.00	12.96
25	ATOM	2803	C18	INH	1	24.002	23.389	38.671	1.00	9.96
	ATOM	2804	C19	INH	1	23.960	23.670	40.050	1.00	12.52
	ATOM	2805	C20	INH	1	25.061	23.588	40.873	1.00	9.20
	ATOM	2806	C21	INH	1	26.277	23.249	40.288	1.00	8.09
	ATOM	2807	C22	INH	1	26.358	22.982	38.922	1.00	12.01
30	ATOM	2808	C23	INH	1	25.231	23.078	38.083	1.00	9.75
	ATOM	2809	S24	INH	1	22.477	23.349	37.768	1.00	14.45
	ATOM	2810	H25	INH	1	22.370	28.468	39.825	1.00	0.00
	ATOM	2813	C26	INH	1	25.459	22.914	36.652	1.00	10.95
	ATOM	2814	O27	INH	1	24.820	23.486	35.793	1.00	9.95
35	ATOM	2815	N28	INH	1	26.375	22.067	36.237	1.00	8.18
	ATOM	2816	C29	INH	1	26.728	21.827	34.836	1.00	11.21
	ATOM	2817	H30	INH	1	26.878	21.621	36.929	1.00	0.00
	ATOM	2818	OH2	WAT	2	21.558	15.543	31.347	1.00	34.57
	ATOM	2821	OH2	WAT	3	19.748	10.969	30.910	1.00	34.58
40	ATOM	2824	OH2	WAT	4	21.365	12.094	34.955	1.00	21.09
	ATOM	2827	OH2	WAT	5	19.451	12.246	36.658	1.00	33.66
	ATOM	2830	OH2	WAT	6	20.409	11.131	40.399	1.00	19.44
	ATOM	2833	OH2	WAT	7	36.609	23.110	51.197	1.00	16.49
	ATOM	2836	OH2	WAT	8	41.839	23.999	37.833	1.00	21.62
45	ATOM	2839	OH2	WAT	9	28.639	15.176	47.260	1.00	17.72
	ATOM	2842	OH2	WAT	10	30.568	3.384	45.911	1.00	16.97
	ATOM	2845	OH2	WAT	11	35.989	6.449	36.040	1.00	23.89
	ATOM	2848	OH2	WAT	12	37.523	13.529	37.453	1.00	33.78
	ATOM	2851	OH2	WAT	13	12.478	21.488	28.850	1.00	13.54
50	ATOM	2854	OH2	WAT	14	8.838	23.808	27.621	1.00	15.58
	ATOM	2857	OH2	WAT	15	7.642	15.080	27.836	1.00	28.94
	ATOM	2860	OH2	WAT	16	11.342	8.718	32.654	1.00	33.92
	ATOM	2863	OH2	WAT	17	9.649	5.659	29.783	1.00	44.22
	ATOM	2866	OH2	WAT	18	-2.485	28.559	27.818	1.00	18.39
55	ATOM	2869	OH2	WAT	19	-1.777	37.362	28.183	1.00	28.44
	ATOM	2872	OH2	WAT	20	14.649	38.739	34.763	1.00	16.67
	ATOM	2875	OH2	WAT	21	8.109	42.802	21.661	1.00	27.19
	ATOM	2878	OH2	WAT	22	3.134	25.196	11.045	1.00	21.51
	ATOM	2881	OH2	WAT	23	9.971	21.846	32.653	1.00	34.42
60	ATOM	2884	OH2	WAT	24	14.433	32.599	9.687	1.00	17.36
	ATOM	2887	OH2	WAT	25	11.398	37.195	14.059	1.00	26.11
	ATOM	2890	OH2	WAT	26	29.781	37.244	28.518	1.00	21.43

	ATOM	2893	OH2	WAT	27	35.849	33.325	30.099	1.00	20.27
	ATOM	2896	OH2	WAT	28	27.464	25.058	16.086	1.00	20.82
	ATOM	2899	OH2	WAT	29	29.392	28.058	16.329	1.00	19.43
	ATOM	2902	OH2	WAT	30	23.910	16.638	21.546	1.00	21.47
5	ATOM	2905	OH2	WAT	31	19.224	16.063	23.953	1.00	13.66
	ATOM	2908	OH2	WAT	32	20.976	7.537	21.855	1.00	36.76
	ATOM	2911	OH2	WAT	33	25.809	9.009	12.082	1.00	48.71
	ATOM	2914	OH2	WAT	34	15.566	22.277	7.342	1.00	24.82
	ATOM	2917	OH2	WAT	35	30.692	13.466	47.582	1.00	10.58
10	ATOM	2920	OH2	WAT	36	36.346	29.066	57.836	1.00	32.66
	ATOM	2923	OH2	WAT	37	38.598	27.305	56.608	1.00	31.42
	ATOM	2926	OH2	WAT	38	13.255	20.852	9.351	1.00	19.38
	ATOM	2929	OH2	WAT	39	9.204	44.310	24.552	1.00	51.64
	ATOM	2932	OH2	WAT	40	10.488	20.416	30.249	1.00	20.12
15	ATOM	2935	OH2	WAT	41	1.444	22.307	27.486	1.00	20.16
	ATOM	2938	OH2	WAT	42	13.644	13.819	18.526	1.00	18.27
	ATOM	2941	OH2	WAT	43	20.807	15.124	19.891	1.00	27.83
	ATOM	2944	OH2	WAT	44	28.744	18.128	13.980	1.00	42.03
	ATOM	2947	OH2	WAT	45	14.812	13.877	8.917	1.00	42.90
20	ATOM	2950	OH2	WAT	46	3.552	17.624	17.177	1.00	24.34
	ATOM	2953	OH2	WAT	47	2.345	26.652	20.940	1.00	12.63
	ATOM	2956	OH2	WAT	48	32.232	29.072	34.806	1.00	34.28
	ATOM	2959	OH2	WAT	49	33.494	30.874	36.450	1.00	35.88
	ATOM	2962	OH2	WAT	50	37.104	30.711	23.619	1.00	42.33
25	ATOM	2965	OH2	WAT	51	42.763	27.358	26.526	1.00	27.63
	ATOM	2968	OH2	WAT	52	39.763	21.647	34.543	1.00	15.62
	ATOM	2971	OH2	WAT	53	20.360	12.990	32.658	1.00	23.90
	ATOM	2974	OH2	WAT	54	21.438	9.014	31.865	1.00	61.41
	ATOM	2977	OH2	WAT	55	15.153	18.427	39.325	1.00	25.59
30	ATOM	2980	OH2	WAT	56	19.887	37.242	9.240	1.00	26.73
	ATOM	2983	OH2	WAT	57	11.742	12.959	25.389	1.00	19.57
	ATOM	2986	OH2	WAT	58	37.896	28.978	34.608	1.00	20.00
	ATOM	2989	OH2	WAT	59	38.225	32.550	36.300	1.00	24.86
	ATOM	2992	OH2	WAT	60	40.920	28.730	47.779	1.00	40.96
35	ATOM	2995	OH2	WAT	61	41.266	28.151	33.491	1.00	51.77
	ATOM	2998	OH2	WAT	62	22.799	9.655	34.661	1.00	36.76
	ATOM	3001	OH2	WAT	63	21.634	13.436	26.930	1.00	31.52
	ATOM	3004	OH2	WAT	64	13.507	15.777	38.782	1.00	31.16
	ATOM	3007	OH2	WAT	65	11.587	21.132	34.646	1.00	21.10
40	ATOM	3010	OH2	WAT	66	20.242	12.417	51.381	1.00	31.88
	ATOM	3013	OH2	WAT	67	24.611	4.098	40.864	1.00	29.27
	ATOM	3016	OH2	WAT	68	22.783	37.150	46.811	1.00	20.27
	ATOM	3019	OH2	WAT	69	29.339	33.603	22.286	1.00	19.25
	ATOM	3022	OH2	WAT	70	31.445	28.598	18.482	1.00	16.25
45	ATOM	3025	OH2	WAT	71	30.105	25.576	16.144	1.00	30.46
	ATOM	3028	OH2	WAT	72	4.652	8.996	25.021	1.00	48.28
	ATOM	3031	OH2	WAT	73	8.228	20.711	28.704	1.00	30.27
	ATOM	3034	OH2	WAT	74	4.732	27.221	37.992	1.00	39.68
	ATOM	3037	OH2	WAT	75	4.619	26.584	35.351	1.00	26.52
50	ATOM	3040	OH2	WAT	76	-4.638	27.064	27.962	1.00	11.09
	ATOM	3043	OH2	WAT	77	14.851	41.435	37.319	1.00	33.55
	ATOM	3046	OH2	WAT	78	15.763	30.849	8.093	1.00	20.24
	ATOM	3049	OH2	WAT	79	16.483	28.248	5.360	1.00	33.46
	ATOM	3052	OH2	WAT	80	20.689	27.490	7.873	1.00	28.53
55	ATOM	3055	OH2	WAT	81	19.269	32.602	7.780	1.00	39.83
	ATOM	3058	OH2	WAT	82	36.878	30.725	29.104	1.00	25.35
	ATOM	3061	OH2	WAT	83	21.344	16.605	21.979	1.00	32.91
	ATOM	3064	OH2	WAT	84	17.778	17.607	25.626	1.00	10.15
	ATOM	3067	OH2	WAT	85	21.615	19.013	23.652	1.00	16.81
60	ATOM	3070	OH2	WAT	86	27.083	13.777	13.076	1.00	23.62
	ATOM	3073	OH2	WAT	87	25.475	11.817	11.606	1.00	45.34
	ATOM	3076	OH2	WAT	88	6.667	22.239	8.919	1.00	47.37

	ATOM	3079	OH2	WAT	89	2.330	33.344	16.188	1.00	43.32
	ATOM	3082	OH2	WAT	90	29.021	23.106	10.650	1.00	49.29
	ATOM	3085	OH2	WAT	91	30.893	18.696	17.687	1.00	32.91
	ATOM	3088	OH2	WAT	92	32.465	16.031	18.003	1.00	39.83
5	ATOM	3091	OH2	WAT	93	23.477	33.842	9.983	1.00	22.25
	ATOM	3094	OH2	WAT	94	-7.628	36.661	32.110	1.00	27.53
	ATOM	3097	OH2	WAT	95	-6.707	37.614	34.593	1.00	35.91
	ATOM	3100	OH2	WAT	96	1.245	22.504	22.273	1.00	23.01
	ATOM	3103	OH2	WAT	97	5.312	13.742	25.671	1.00	42.58
10	ATOM	3106	OH2	WAT	98	8.971	12.439	26.644	1.00	18.65
	ATOM	3109	OH2	WAT	99	20.411	3.568	25.535	1.00	35.05
	ATOM	3112	OH2	WAT	100	20.415	12.730	11.212	1.00	30.79
	ATOM	3115	OH2	WAT	101	9.622	40.764	32.530	1.00	43.44
	ATOM	3118	OH2	WAT	102	14.210	21.833	35.197	1.00	29.17
15	ATOM	3121	OH2	WAT	103	11.160	18.116	33.043	1.00	40.76
	ATOM	3124	OH2	WAT	104	7.861	18.112	28.063	1.00	23.43
	ATOM	3127	OH2	WAT	105	7.046	22.298	36.473	1.00	41.52
	ATOM	3130	OH2	WAT	106	12.514	17.198	36.511	1.00	35.64
	ATOM	3133	OH2	WAT	107	17.009	28.028	51.290	1.00	23.77
20	ATOM	3136	OH2	WAT	108	20.765	29.092	53.372	1.00	32.30
	ATOM	3139	OH2	WAT	109	24.557	24.300	56.556	1.00	33.15
	ATOM	3142	OH2	WAT	110	35.271	33.661	52.591	1.00	24.90
	ATOM	3145	OH2	WAT	111	30.643	36.640	47.962	1.00	27.93
	ATOM	3148	OH2	WAT	112	35.933	41.719	46.758	1.00	38.16
25	ATOM	3151	OH2	WAT	113	28.319	39.907	54.314	1.00	28.23
	ATOM	3154	OH2	WAT	114	24.690	41.190	53.704	1.00	35.42
	ATOM	3157	OH2	WAT	115	25.486	40.639	51.219	1.00	31.03
	ATOM	3160	OH2	WAT	116	23.100	34.896	38.725	1.00	42.37
	ATOM	3163	OH2	WAT	117	10.823	38.831	33.837	1.00	49.21
30	ATOM	3166	OH2	WAT	118	7.690	37.458	36.305	1.00	47.42
	ATOM	3169	OH2	WAT	119	5.799	33.794	37.318	1.00	28.21
	ATOM	3172	OH2	WAT	120	2.368	20.697	24.107	1.00	19.92
	ATOM	3175	OH2	WAT	121	0.378	24.277	24.154	1.00	25.89
	ATOM	3178	OH2	WAT	122	7.722	30.497	8.738	1.00	25.68
35	ATOM	3181	OH2	WAT	123	13.365	24.198	6.019	1.00	35.59
	ATOM	3184	OH2	WAT	124	17.075	24.349	6.476	1.00	39.47
	ATOM	3187	OH2	WAT	125	15.779	17.507	6.275	1.00	36.83
	ATOM	3190	OH2	WAT	126	27.470	15.077	8.844	1.00	42.62
	ATOM	3193	OH2	WAT	127	29.691	22.883	13.565	1.00	42.23
40	ATOM	3196	OH2	WAT	128	32.124	32.887	22.257	1.00	28.43
	ATOM	3199	OH2	WAT	129	29.375	36.312	23.573	1.00	27.73
	ATOM	3202	OH2	WAT	130	41.067	23.537	32.910	1.00	23.39
	ATOM	3205	OH2	WAT	131	43.927	28.077	37.972	1.00	31.50
	ATOM	3208	OH2	WAT	132	44.964	30.901	38.738	1.00	37.57
45	ATOM	3211	OH2	WAT	133	35.799	22.625	53.733	1.00	39.11
	ATOM	3214	OH2	WAT	134	19.839	9.456	38.121	1.00	37.70
	ATOM	3217	OH2	WAT	135	20.489	5.751	36.729	1.00	47.67
	ATOM	3220	OH2	WAT	136	24.240	7.520	37.753	1.00	37.13
	ATOM	3223	OH2	WAT	137	24.010	13.717	34.742	1.00	40.20
50	ATOM	3226	OH2	WAT	138	30.098	14.460	34.736	1.00	24.45
	ATOM	3229	OH2	WAT	139	31.427	7.867	36.965	1.00	21.00
	ATOM	3232	OH2	WAT	140	32.907	9.795	35.276	1.00	51.73
	ATOM	3235	OH2	WAT	141	35.344	7.757	32.156	1.00	32.83
	ATOM	3238	OH2	WAT	142	31.384	11.635	33.682	1.00	38.01
55	ATOM	3241	OH2	WAT	143	23.343	3.443	43.671	1.00	35.01
	ATOM	3244	OH2	WAT	144	18.659	6.471	45.608	1.00	31.79
	ATOM	3247	OH2	WAT	145	19.341	15.404	33.982	1.00	18.01
	ATOM	3250	OH2	WAT	146	27.139	8.710	37.331	1.00	29.64
	ATOM	3253	OH2	WAT	147	31.256	3.321	42.556	1.00	31.65
60	ATOM	3256	OH2	WAT	148	28.359	2.450	41.120	1.00	32.66
	ATOM	3259	OH2	WAT	149	31.314	27.256	32.926	1.00	40.37
	ATOM	3262	OH2	WAT	150	36.263	30.965	35.112	1.00	24.03

	ATOM	3265	OH2	WAT	151	37.239	35.994	29.752	1.00	38.16
	ATOM	3268	OH2	WAT	152	39.250	35.575	27.849	1.00	42.33
	ATOM	3271	OH2	WAT	153	36.640	32.308	26.467	1.00	52.84
	ATOM	3274	OH2	WAT	154	37.255	9.810	37.726	1.00	43.76
5	ATOM	3277	OH2	WAT	155	37.286	11.517	40.837	1.00	42.03
	ATOM	3280	OH2	WAT	156	43.304	18.445	42.509	1.00	40.18
	ATOM	3283	OH2	WAT	157	34.361	32.941	43.024	1.00	30.66
	ATOM	3286	OH2	WAT	158	35.844	29.928	45.687	1.00	25.74
	ATOM	3289	OH2	WAT	159	1.268	29.676	15.117	1.00	47.31
10	ATOM	3292	OH2	WAT	160	34.609	13.989	49.448	1.00	20.17
	ATOM	3295	OH2	WAT	161	35.958	15.397	47.533	1.00	30.96
	ATOM	3298	OH2	WAT	162	40.889	17.103	44.440	1.00	48.86
	ATOM	3301	OH2	WAT	163	35.013	24.475	56.536	1.00	26.72
	ATOM	3304	OH2	WAT	164	28.024	23.574	54.776	1.00	39.22
15	ATOM	3307	OH2	WAT	165	25.222	7.144	49.428	1.00	24.76
	ATOM	3310	OH2	WAT	166	25.601	9.166	51.153	1.00	34.45
	ATOM	3313	OH2	WAT	167	18.489	35.617	47.784	1.00	44.87
	ATOM	3316	OH2	WAT	168	22.476	37.926	51.045	1.00	60.03
	ATOM	3319	OH2	WAT	169	22.322	35.747	44.073	1.00	46.42
20	ATOM	3322	OH2	WAT	170	23.612	36.162	41.598	1.00	42.59
	ATOM	3325	OH2	WAT	171	14.381	20.419	37.568	1.00	46.86
	ATOM	3328	OH2	WAT	172	22.761	3.445	38.697	1.00	49.49
	ATOM	3331	OH2	WAT	173	33.241	5.858	37.182	1.00	28.92
	ATOM	3334	OH2	WAT	174	34.965	2.244	43.799	1.00	44.57
25	ATOM	3337	OH2	WAT	175	34.333	43.886	49.298	1.00	46.97
	ATOM	3340	OH2	WAT	176	25.565	0.658	41.945	1.00	47.19
	ATOM	3343	OH2	WAT	177	26.313	11.651	35.719	1.00	31.94
	ATOM	3346	OH2	WAT	178	32.504	24.467	16.970	1.00	50.42
	ATOM	3349	OH2	WAT	179	34.156	27.484	17.903	1.00	48.54
30	ATOM	3352	OH2	WAT	180	8.001	18.060	32.756	1.00	51.39
	ATOM	3355	OH2	WAT	181	0.047	33.978	33.580	1.00	21.19
	ATOM	3358	OH2	WAT	182	32.279	36.464	20.504	1.00	54.71
	ATOM	3361	OH2	WAT	183	42.067	30.423	24.561	1.00	43.67
	ATOM	3364	OH2	WAT	184	20.740	13.907	24.216	1.00	50.83
35	ATOM	3367	OH2	WAT	185	19.436	35.382	40.597	1.00	24.45
	ATOM	3370	OH2	WAT	186	20.417	13.148	29.352	1.00	53.87
	ATOM	3373	OH2	WAT	187	13.036	16.554	18.143	1.00	16.99
	ATOM	3376	OH2	WAT	188	10.226	18.910	15.071	1.00	15.64
	ATOM	3379	OH2	WAT	189	7.822	12.284	14.165	1.00	32.90
40	ATOM	3382	OH2	WAT	190	3.971	14.915	8.760	1.00	56.19
	ATOM	3385	OH2	WAT	191	5.965	17.594	9.360	1.00	40.85
	ATOM	3388	OH2	WAT	192	11.199	20.596	7.314	1.00	37.09
	ATOM	3391	OH2	WAT	193	3.315	16.674	24.185	1.00	37.23
	ATOM	3394	OH2	WAT	194	4.561	13.987	23.164	1.00	30.44
45	ATOM	3397	OH2	WAT	195	4.453	7.658	17.424	1.00	40.88
	ATOM	3400	OH2	WAT	196	25.666	15.105	15.045	1.00	29.64
	ATOM	3403	OH2	WAT	197	23.330	12.169	9.822	1.00	41.58
	ATOM	3406	OH2	WAT	198	20.744	4.272	11.486	1.00	38.45
	ATOM	3409	OH2	WAT	199	29.873	12.613	14.097	1.00	49.09
50	ATOM	3412	OH2	WAT	200	19.695	24.896	7.766	1.00	29.94
	ATOM	3415	OH2	WAT	201	22.211	35.676	8.496	1.00	38.59
	ATOM	3418	OH2	WAT	202	23.806	39.490	8.814	1.00	30.32
	ATOM	3421	OH2	WAT	203	8.784	38.483	40.768	1.00	56.25
	ATOM	3424	OH2	WAT	204	0.692	26.651	30.993	1.00	22.58
55	ATOM	3427	OH2	WAT	205	-0.855	24.992	29.691	1.00	34.48
	ATOM	3430	OH2	WAT	206	32.745	30.270	14.656	1.00	59.01
	ATOM	3433	OH2	WAT	207	39.955	23.802	24.361	1.00	48.87
	ATOM	3436	OH2	WAT	208	39.092	25.709	22.524	1.00	41.28
	ATOM	3439	OH2	WAT	209	38.120	27.793	20.132	1.00	37.51
60	ATOM	3442	OH2	WAT	210	35.318	12.365	31.086	1.00	46.78
	ATOM	3445	OH2	WAT	211	27.309	36.193	35.134	1.00	26.64
	ATOM	3448	OH2	WAT	212	3.494	20.818	16.711	1.00	31.85

	ATOM	3451	OH2	WAT	213	28.303	39.213	45.416	1.00	37.98
	ATOM	3454	OH2	WAT	214	26.692	20.777	4.305	1.00	44.85
	ATOM	3457	OH2	WAT	215	16.690	6.182	35.698	1.00	44.81
	ATOM	3460	OH2	WAT	216	6.380	29.513	38.647	1.00	41.88
5	ATOM	3463	OH2	WAT	217	14.971	24.510	40.178	1.00	26.95
	ATOM	3466	OH2	WAT	218	13.404	25.557	38.397	1.00	19.80
	ATOM	3469	OH2	WAT	219	10.817	26.371	38.798	1.00	26.12
	ATOM	3472	OH2	WAT	220	11.017	28.411	36.958	1.00	12.69
	ATOM	3475	OH2	WAT	221	8.705	29.831	37.451	1.00	23.46
10	ATOM	3478	OH2	WAT	222	9.900	31.945	38.743	1.00	33.81
	ATOM	3481	OH2	WAT	223	13.883	32.444	44.288	1.00	40.76
	ATOM	3484	OH2	WAT	224	15.429	34.735	45.252	1.00	40.47
	ATOM	3487	OH2	WAT	225	21.224	38.749	36.092	1.00	33.98
	ATOM	3490	OH2	WAT	226	23.748	37.659	35.671	1.00	41.83
15	ATOM	3493	OH2	WAT	227	24.333	39.452	47.629	1.00	59.51
	ATOM	3496	OH2	WAT	228	25.490	16.140	37.703	1.00	10.90
	ATOM	3499	OH2	WAT	229	26.549	14.796	35.710	1.00	49.49
	ATOM	3502	OH2	WAT	230	20.276	17.895	32.704	1.00	29.37
	ATOM	3505	OH2	WAT	231	24.010	15.412	32.805	1.00	38.09
20	ATOM	3508	OH2	WAT	232	26.924	18.321	33.816	1.00	48.60
	ATOM	3511	OH2	WAT	233	29.291	17.381	32.846	1.00	33.59
	ATOM	3514	OH2	WAT	234	23.956	16.887	29.501	1.00	35.34
	ATOM	3517	OH2	WAT	235	25.804	14.472	29.865	1.00	48.14
	ATOM	3520	OH2	WAT	236	24.351	12.836	27.896	1.00	46.78
25	ATOM	3523	OH2	WAT	237	25.578	10.706	26.607	1.00	52.41
	ATOM	3526	OH2	WAT	238	22.822	10.097	28.216	1.00	49.43
	ATOM	3529	OH2	WAT	239	27.474	16.168	28.090	1.00	33.81
	ATOM	3532	OH2	WAT	240	29.944	17.516	29.574	1.00	37.49
	ATOM	3535	OH2	WAT	241	30.827	19.605	27.933	1.00	32.55
30	ATOM	3538	OH2	WAT	242	31.958	17.619	25.853	1.00	25.83
	ATOM	3541	OH2	WAT	243	40.784	11.161	37.660	1.00	29.72
	ATOM	3544	OH2	WAT	244	45.930	16.850	31.352	1.00	42.66
	ATOM	3547	OH2	WAT	245	20.056	3.884	22.189	1.00	49.65
	ATOM	3550	OH2	WAT	246	32.015	21.888	20.533	1.00	36.62
35	ATOM	3553	OH2	WAT	247	33.308	19.476	19.839	1.00	47.65
	ATOM	3556	OH2	WAT	248	33.236	34.782	27.926	1.00	34.42
	ATOM	3559	OH2	WAT	249	37.129	32.062	32.167	1.00	43.94
	ATOM	3562	OH2	WAT	250	41.065	19.435	46.912	1.00	50.08
	ATOM	3565	OH2	WAT	251	42.232	17.933	49.143	1.00	50.59
40	ATOM	3568	OH2	WAT	252	26.618	15.219	49.281	1.00	44.02
	ATOM	3571	OH2	WAT	253	30.637	29.550	11.171	1.00	12.73
	ATOM	3574	OH2	WAT	254	18.254	20.907	51.627	1.00	27.92
	ATOM	3577	OH2	WAT	255	9.554	27.406	41.176	1.00	35.17
	ATOM	3580	OH2	WAT	256	10.116	30.813	41.301	1.00	33.99
45	ATOM	3583	OH2	WAT	257	0.327	30.797	32.519	1.00	32.89
	ATOM	3586	OH2	WAT	258	-1.664	31.695	33.967	1.00	39.29
	ATOM	3589	OH2	WAT	259	-2.387	39.151	33.967	1.00	31.35
	ATOM	3592	OH2	WAT	260	-1.363	21.384	21.678	1.00	28.57
	ATOM	3595	OH2	WAT	261	4.238	17.555	13.578	1.00	38.32
50	ATOM	3598	OH2	WAT	262	11.553	17.529	6.969	1.00	33.57
	ATOM	3601	OH2	WAT	263	17.099	12.298	9.712	1.00	36.46
	ATOM	3604	OH2	WAT	264	41.674	26.840	37.188	1.00	28.68
	ATOM	3607	OH2	WAT	265	40.334	28.815	35.964	1.00	26.36
	ATOM	3610	OH2	WAT	266	43.133	15.151	37.148	1.00	39.90
55	ATOM	3613	OH2	WAT	267	23.457	27.633	6.838	1.00	35.51
	ATOM	3616	OH2	WAT	268	21.005	30.748	9.831	1.00	32.41
	ATOM	3619	OH2	WAT	269	18.728	30.160	10.740	1.00	33.43
	ATOM	3622	OH2	WAT	270	8.844	28.387	7.562	1.00	30.86
	ATOM	3625	OH2	WAT	271	25.931	18.874	30.011	1.00	38.08
60	ATOM	3628	OH2	WAT	272	32.095	36.203	31.710	1.00	43.93

TABLE 3

Atomic Coordinates for VEGFR2KD: 2,4-Dimethyl-thiazole-5-carboxylic acid {3-[4'-amino-2'-(3,4,5-trimethoxy phenylamino)-[2,5]bithiazolyl-4-yl]-phenyl}-amide (Compound 3) Complex Crystalline Structure									
5	ATOM	1	CB	GLU	815	33.991	16.609	27.663	1.00 62.40
10	ATOM	2	CG	GLU	815	32.918	17.496	26.725	1.00 61.57
	ATOM	3	CD	GLU	815	31.200	17.387	26.650	1.00 62.06
	ATOM	4	OE1	GLU	815	30.746	18.118	27.512	1.00 58.75
	ATOM	5	OE2	GLU	815	30.352	16.971	25.758	1.00 61.31
	ATOM	6	C	GLU	815	35.846	14.533	28.063	1.00 62.13
15	ATOM	7	O	GLU	815	36.360	15.399	28.763	1.00 63.18
	ATOM	8	HT1	GLU	815	33.556	14.316	29.229	1.00 25.00
	ATOM	9	HT2	GLU	815	33.331	13.255	27.881	1.00 25.00
	ATOM	10	N	GLU	815	33.396	14.245	28.197	1.00 63.02
	ATOM	11	HT3	GLU	815	32.475	14.700	28.007	1.00 25.00
20	ATOM	12	CA	GLU	815	34.453	15.000	27.454	1.00 62.64
	ATOM	13	N	HIS	816	36.495	13.298	27.899	1.00 61.58
	ATOM	14	H	HIS	816	36.092	12.624	27.312	1.00 25.00
	ATOM	15	CA	HIS	816	37.833	12.835	28.641	1.00 61.49
	ATOM	16	C	HIS	816	38.444	13.847	29.737	1.00 60.13
25	ATOM	17	O	HIS	816	39.630	14.161	29.912	1.00 57.99
	ATOM	18	CB	HIS	816	39.163	12.410	27.741	1.00 62.22
	ATOM	19	CG	HIS	816	39.331	10.989	27.169	1.00 64.71
	ATOM	20	ND1	HIS	816	40.544	10.400	26.746	1.00 64.36
	ATOM	21	CE1	HIS	816	40.266	9.192	26.083	1.00 62.25
30	ATOM	22	CD2	HIS	816	38.317	10.082	26.736	1.00 63.35
	ATOM	23	NE2	HIS	816	38.891	9.004	26.081	1.00 61.71
	ATOM	24	HE2	HIS	816	38.430	8.289	25.595	1.00 25.00
	ATOM	25	N	CYS	817	37.451	14.158	30.625	1.00 59.44
	ATOM	26	H	CYS	817	36.618	13.724	30.391	1.00 25.00
35	ATOM	27	CA	CYS	817	37.437	15.026	31.811	1.00 57.56
	ATOM	28	CB	CYS	817	36.149	15.275	32.567	1.00 56.75
	ATOM	29	SG	CYS	817	34.838	14.559	31.739	1.00 60.46
	ATOM	30	C	CYS	817	38.218	14.505	32.911	1.00 56.92
	ATOM	31	O	CYS	817	38.692	15.345	33.659	1.00 59.91
40	ATOM	32	N	GLU	818	38.307	13.190	33.124	1.00 54.69
	ATOM	33	H	GLU	818	37.792	12.600	32.539	1.00 25.00
	ATOM	34	CA	GLU	818	39.131	12.682	34.261	1.00 50.49
	ATOM	35	CB	GLU	818	39.209	11.163	34.295	1.00 49.99
	ATOM	36	CG	GLU	818	37.896	10.403	34.069	1.00 47.59
45	ATOM	37	CD	GLU	818	37.671	10.322	32.570	1.00 48.88
	ATOM	38	OE1	GLU	818	36.495	10.237	32.269	1.00 50.22
	ATOM	39	OE2	GLU	818	38.599	10.327	31.732	1.00 47.75
	ATOM	40	C	GLU	818	40.564	13.231	34.306	1.00 49.35
	ATOM	41	O	GLU	818	41.118	13.156	35.392	1.00 49.37
50	ATOM	42	N	ARG	819	41.173	13.774	33.208	1.00 45.97
	ATOM	43	H	ARG	819	40.685	13.748	32.348	1.00 25.00
	ATOM	44	CA	ARG	819	42.506	14.407	33.310	1.00 41.49
	ATOM	45	CB	ARG	819	43.417	14.241	32.088	1.00 39.40
	ATOM	46	C	ARG	819	42.323	15.933	33.385	1.00 41.37
55	ATOM	47	O	ARG	819	43.274	16.661	33.258	1.00 40.56
	ATOM	48	N	LEU	820	41.113	16.510	33.415	1.00 41.55
	ATOM	49	H	LEU	820	40.386	15.926	33.400	1.00 25.00
	ATOM	50	CA	LEU	820	40.900	17.981	33.525	1.00 42.43
	ATOM	51	CB	LEU	820	39.397	18.253	33.280	1.00 40.63
60	ATOM	52	CG	LEU	820	38.820	18.643	31.856	1.00 40.31
	ATOM	53	CD1	LEU	820	39.014	17.613	30.751	1.00 41.40
	ATOM	54	CD2	LEU	820	37.329	18.534	31.876	1.00 34.06



	ATOM	55	C	LEU	820	41.324	18.413	34.968	1.00	44.32
	ATOM	56	O	LEU	820	41.210	17.584	35.873	1.00	45.34
	ATOM	57	N	PRO	821	41.870	19.604	35.339	1.00	44.72
	ATOM	58	CD	PRO	821	42.686	20.513	34.543	1.00	44.44
5	ATOM	59	CA	PRO	821	42.085	19.977	36.770	1.00	43.39
	ATOM	60	CB	PRO	821	43.379	20.842	36.791	1.00	44.61
	ATOM	61	CG	PRO	821	43.982	20.592	35.408	1.00	44.10
	ATOM	62	C	PRO	821	41.021	20.640	37.674	1.00	41.38
	ATOM	63	O	PRO	821	39.891	21.095	37.372	1.00	38.84
10	ATOM	64	N	TYR	822	41.508	20.634	38.917	1.00	38.51
	ATOM	65	H	TYR	822	42.406	20.272	39.073	1.00	25.00
	ATOM	66	CA	TYR	822	40.715	21.139	40.001	1.00	36.09
	ATOM	67	CB	TYR	822	39.989	20.064	40.741	1.00	30.28
	ATOM	68	CG	TYR	822	39.070	20.793	41.712	1.00	27.05
15	ATOM	69	CD1	TYR	822	39.305	20.602	43.040	1.00	23.15
	ATOM	70	CE1	TYR	822	38.530	21.226	43.986	1.00	18.26
	ATOM	71	CD2	TYR	822	37.986	21.680	41.367	1.00	25.83
	ATOM	72	CE2	TYR	822	37.203	22.318	42.312	1.00	19.73
	ATOM	73	CZ	TYR	822	37.534	22.054	43.626	1.00	18.93
20	ATOM	74	OH	TYR	822	36.852	22.553	44.703	1.00	21.59
	ATOM	75	HH	TYR	822	36.139	23.117	44.412	1.00	25.00
	ATOM	76	C	TYR	822	41.490	21.874	41.051	1.00	36.67
	ATOM	77	O	TYR	822	42.053	21.270	41.972	1.00	36.77
	ATOM	78	N	ASP	823	41.358	23.219	40.898	1.00	36.35
25	ATOM	79	H	ASP	823	40.764	23.503	40.184	1.00	25.00
	ATOM	80	CA	ASP	823	41.918	24.287	41.674	1.00	32.06
	ATOM	81	CB	ASP	823	41.837	25.547	40.805	1.00	34.96
	ATOM	82	CG	ASP	823	43.062	26.404	41.103	1.00	38.03
	ATOM	83	OD1	ASP	823	43.505	26.361	42.253	1.00	42.10
30	ATOM	84	OD2	ASP	823	43.589	27.040	40.168	1.00	38.16
	ATOM	85	C	ASP	823	41.243	24.509	42.946	1.00	30.61
	ATOM	86	O	ASP	823	40.474	25.421	43.007	1.00	32.34
	ATOM	87	N	ALA	824	41.423	23.817	44.012	1.00	31.62
	ATOM	88	H	ALA	824	42.098	23.098	44.046	1.00	25.00
35	ATOM	89	CA	ALA	824	40.653	24.161	45.247	1.00	32.98
	ATOM	90	CB	ALA	824	41.072	23.218	46.431	1.00	34.30
	ATOM	91	C	ALA	824	40.838	25.617	45.726	1.00	33.91
	ATOM	92	O	ALA	824	39.947	26.181	46.373	1.00	34.58
	ATOM	93	N	SER	825	42.025	26.197	45.506	1.00	32.18
40	ATOM	94	H	SER	825	42.738	25.696	45.067	1.00	25.00
	ATOM	95	CA	SER	825	42.224	27.583	45.929	1.00	32.44
	ATOM	96	CB	SER	825	43.572	28.125	45.583	1.00	31.80
	ATOM	97	OG	SER	825	43.804	27.616	44.343	1.00	29.72
	ATOM	98	HG	SER	825	44.623	27.963	43.983	1.00	25.00
45	ATOM	99	C	SER	825	41.224	28.477	45.291	1.00	33.75
	ATOM	100	O	SER	825	40.634	29.400	45.893	1.00	35.61
	ATOM	101	N	LYS	826	41.045	28.154	44.019	1.00	31.92
	ATOM	102	H	LYS	826	41.581	27.482	43.566	1.00	25.00
	ATOM	103	CA	LYS	826	39.993	28.952	43.396	1.00	29.44
50	ATOM	104	CB	LYS	826	40.110	29.054	41.889	1.00	26.38
	ATOM	105	CG	LYS	826	38.901	29.979	41.482	1.00	24.13
	ATOM	106	CD	LYS	826	39.302	30.257	39.995	1.00	23.39
	ATOM	107	CE	LYS	826	38.310	30.944	39.071	1.00	19.13
	ATOM	108	NZ	LYS	826	39.087	30.967	37.801	1.00	22.11
55	ATOM	109	HZ1	LYS	826	39.597	30.084	37.610	1.00	25.00
	ATOM	110	HZ2	LYS	826	39.780	31.739	37.855	1.00	25.00
	ATOM	111	HZ3	LYS	826	38.469	31.182	36.998	1.00	25.00
	ATOM	112	C	LYS	826	38.658	28.413	43.718	1.00	27.43
	ATOM	113	O	LYS	826	37.972	29.049	44.473	1.00	31.68
60	ATOM	114	N	TRP	827	38.211	27.223	43.444	1.00	24.25
	ATOM	115	H	TRP	827	38.823	26.546	43.106	1.00	25.00
	ATOM	116	CA	TRP	827	36.790	26.927	43.772	1.00	19.81

	ATOM	117	CB	TRP	827	36.301	25.942	42.781	1.00	15.43
	ATOM	118	CG	TRP	827	36.722	26.467	41.484	1.00	8.12
	ATOM	119	CD2	TRP	827	36.040	27.365	40.657	1.00	4.68
	ATOM	120	CE2	TRP	827	36.767	27.536	39.525	1.00	6.68
5	ATOM	121	CE3	TRP	827	34.855	28.030	40.812	1.00	10.17
	ATOM	122	CD1	TRP	827	37.823	26.151	40.797	1.00	5.86
	ATOM	123	NE1	TRP	827	37.861	26.777	39.570	1.00	10.84
	ATOM	124	HE1	TRP	827	38.626	26.865	38.956	1.00	25.00
	ATOM	125	CZ2	TRP	827	36.233	28.323	38.540	1.00	11.79
10	ATOM	126	CZ3	TRP	827	34.288	28.855	39.866	1.00	13.12
	ATOM	127	CH2	TRP	827	35.028	29.020	38.725	1.00	11.92
	ATOM	128	C	TRP	827	36.306	26.436	45.069	1.00	21.07
	ATOM	129	O	TRP	827	35.097	26.308	45.301	1.00	21.47
	ATOM	130	N	GLU	828	37.137	26.057	45.963	1.00	21.26
15	ATOM	131	H	GLU	828	38.075	26.310	45.968	1.00	25.00
	ATOM	132	CA	GLU	828	36.474	25.368	47.072	1.00	21.86
	ATOM	133	CB	GLU	828	37.639	24.613	47.756	1.00	23.30
	ATOM	134	CG	GLU	828	37.345	23.560	48.888	1.00	19.85
	ATOM	135	CD	GLU	828	36.525	22.381	48.429	1.00	21.41
20	ATOM	136	OE1	GLU	828	35.646	21.922	49.157	1.00	18.71
	ATOM	137	OE2	GLU	828	36.779	21.978	47.297	1.00	23.69
	ATOM	138	C	GLU	828	35.658	26.180	47.969	1.00	22.93
	ATOM	139	O	GLU	828	36.083	27.252	48.290	1.00	25.82
	ATOM	140	N	PHE	829	34.593	25.752	48.551	1.00	23.26
25	ATOM	141	H	PHE	829	34.253	24.868	48.312	1.00	25.00
	ATOM	142	CA	PHE	829	33.916	26.635	49.418	1.00	24.85
	ATOM	143	CB	PHE	829	32.690	27.259	48.638	1.00	23.46
	ATOM	144	CG	PHE	829	31.877	28.154	49.557	1.00	23.16
	ATOM	145	CD1	PHE	829	32.265	29.471	49.862	1.00	20.57
30	ATOM	146	CD2	PHE	829	30.673	27.712	50.142	1.00	24.45
	ATOM	147	CE1	PHE	829	31.442	30.249	50.709	1.00	20.21
	ATOM	148	CE2	PHE	829	29.816	28.460	50.999	1.00	19.49
	ATOM	149	CZ	PHE	829	30.241	29.756	51.265	1.00	21.45
	ATOM	150	C	PHE	829	33.520	25.875	50.669	1.00	28.35
35	ATOM	151	O	PHE	829	32.975	24.774	50.699	1.00	31.85
	ATOM	152	N	PRO	830	33.783	26.439	51.812	1.00	30.78
	ATOM	153	CD	PRO	830	34.647	27.626	51.940	1.00	30.70
	ATOM	154	CA	PRO	830	33.480	25.854	53.090	1.00	28.75
	ATOM	155	CB	PRO	830	33.803	26.897	54.062	1.00	29.72
40	ATOM	156	CG	PRO	830	34.970	27.594	53.373	1.00	28.14
	ATOM	157	C	PRO	830	32.144	25.380	53.300	1.00	30.22
	ATOM	158	O	PRO	830	31.248	26.159	53.571	1.00	31.28
	ATOM	159	N	ARG	831	31.978	24.125	53.472	1.00	30.84
	ATOM	160	H	ARG	831	32.708	23.484	53.476	1.00	25.00
45	ATOM	161	CA	ARG	831	30.583	23.694	53.718	1.00	32.53
	ATOM	162	CB	ARG	831	30.658	22.057	53.725	1.00	36.60
	ATOM	163	CG	ARG	831	29.577	20.867	53.694	1.00	35.93
	ATOM	164	CD	ARG	831	29.889	19.666	52.626	1.00	35.41
	ATOM	165	NE	ARG	831	31.195	19.024	52.784	1.00	32.49
50	ATOM	166	HE	ARG	831	31.616	19.009	53.662	1.00	25.00
	ATOM	167	CZ	ARG	831	31.798	18.365	51.828	1.00	30.04
	ATOM	168	NH1	ARG	831	32.957	17.856	52.059	1.00	27.73
	ATOM	169	HH11	ARG	831	33.373	17.940	52.961	1.00	25.00
	ATOM	170	HH12	ARG	831	33.427	17.392	51.311	1.00	25.00
55	ATOM	171	NH2	ARG	831	31.387	18.294	50.601	1.00	27.45
	ATOM	172	HH21	ARG	831	30.536	18.736	50.322	1.00	25.00
	ATOM	173	HH22	ARG	831	31.937	17.791	49.929	1.00	25.00
	ATOM	174	C	ARG	831	30.045	24.386	54.994	1.00	32.07
	ATOM	175	O	ARG	831	28.853	24.549	55.202	1.00	33.33
60	ATOM	176	N	ASP	832	30.923	24.880	55.880	1.00	34.96
	ATOM	177	H	ASP	832	31.870	24.841	55.637	1.00	25.00
	ATOM	178	CA	ASP	832	30.455	25.551	57.151	1.00	37.09

	ATOM	179	CB	ASP	832	31.670	25.876	58.215	1.00	39.85
	ATOM	180	CG	ASP	832	33.039	26.526	57.826	1.00	44.17
	ATOM	181	OD1	ASP	832	33.745	25.944	57.019	1.00	47.79
	ATOM	182	OD2	ASP	832	33.484	27.565	58.363	1.00	46.89
5	ATOM	183	C	ASP	832	29.687	26.845	56.857	1.00	35.94
	ATOM	184	O	ASP	832	28.762	27.147	57.628	1.00	33.47
	ATOM	185	N	ARG	833	30.167	27.545	55.770	1.00	33.36
	ATOM	186	H	ARG	833	30.896	27.130	55.268	1.00	25.00
	ATOM	187	CA	ARG	833	29.697	28.800	55.204	1.00	32.72
10	ATOM	188	CB	ARG	833	30.858	29.505	54.474	1.00	26.77
	ATOM	189	CG	ARG	833	32.079	29.630	55.361	1.00	28.24
	ATOM	190	CD	ARG	833	32.584	31.038	55.552	1.00	33.81
	ATOM	191	NE	ARG	833	33.862	31.187	54.873	1.00	39.69
	ATOM	192	HE	ARG	833	33.852	31.464	53.937	1.00	25.00
15	ATOM	193	CZ	ARG	833	35.044	30.789	55.436	1.00	43.00
	ATOM	194	NH1	ARG	833	36.213	30.938	54.746	1.00	42.18
	ATOM	195	HH11	ARG	833	36.199	31.316	53.811	1.00	25.00
	ATOM	196	HH12	ARG	833	37.095	30.697	55.151	1.00	25.00
	ATOM	197	NH2	ARG	833	35.156	30.262	56.674	1.00	41.37
20	ATOM	198	HH21	ARG	833	34.366	30.097	57.255	1.00	25.00
	ATOM	199	HH22	ARG	833	36.087	30.057	56.990	1.00	25.00
	ATOM	200	C	ARG	833	28.539	28.539	54.207	1.00	37.23
	ATOM	201	O	ARG	833	28.259	29.365	53.334	1.00	42.04
	ATOM	202	N	LEU	834	27.668	27.543	54.324	1.00	37.24
25	ATOM	203	H	LEU	834	27.755	26.931	55.095	1.00	25.00
	ATOM	204	CA	LEU	834	26.641	27.334	53.262	1.00	35.52
	ATOM	205	CB	LEU	834	27.209	26.351	52.217	1.00	33.79
	ATOM	206	CG	LEU	834	26.375	25.903	51.016	1.00	36.17
	ATOM	207	CD1	LEU	834	26.337	27.107	49.992	1.00	36.58
30	ATOM	208	CD2	LEU	834	27.046	24.759	50.225	1.00	35.51
	ATOM	209	C	LEU	834	25.567	26.715	54.013	1.00	34.92
	ATOM	210	O	LEU	834	25.868	25.681	54.595	1.00	38.86
	ATOM	211	N	LYS	835	24.463	27.391	54.152	1.00	32.53
	ATOM	212	H	LYS	835	24.420	28.265	53.700	1.00	25.00
35	ATOM	213	CA	LYS	835	23.325	26.873	54.853	1.00	33.81
	ATOM	214	CB	LYS	835	22.666	27.942	55.742	1.00	32.61
	ATOM	215	C	LYS	835	22.248	26.344	53.865	1.00	35.25
	ATOM	216	O	LYS	835	21.419	27.064	53.326	1.00	37.84
	ATOM	217	N	LEU	836	22.240	25.070	53.517	1.00	35.72
40	ATOM	218	H	LEU	836	22.868	24.492	54.003	1.00	25.00
	ATOM	219	CA	LEU	836	21.266	24.426	52.570	1.00	35.00
	ATOM	220	CB	LEU	836	21.570	22.914	52.569	1.00	36.82
	ATOM	221	CG	LEU	836	22.677	22.463	51.630	1.00	35.64
	ATOM	222	CD1	LEU	836	23.897	23.377	51.794	1.00	34.58
45	ATOM	223	CD2	LEU	836	22.940	20.955	51.892	1.00	35.53
	ATOM	224	C	LEU	836	19.823	24.666	52.972	1.00	33.72
	ATOM	225	O	LEU	836	19.616	24.865	54.129	1.00	35.10
	ATOM	226	N	GLY	837	18.830	24.590	52.138	1.00	32.77
	ATOM	227	H	GLY	837	19.030	24.205	51.279	1.00	25.00
50	ATOM	228	CA	GLY	837	17.439	24.822	52.449	1.00	34.34
	ATOM	229	C	GLY	837	16.574	23.893	51.560	1.00	39.07
	ATOM	230	O	GLY	837	16.804	22.678	51.380	1.00	41.75
	ATOM	231	N	LYS	838	15.553	24.531	50.999	1.00	39.26
	ATOM	232	H	LYS	838	15.403	25.409	51.405	1.00	25.00
55	ATOM	233	CA	LYS	838	14.536	23.925	50.113	1.00	38.74
	ATOM	234	CB	LYS	838	13.706	24.963	49.451	1.00	44.66
	ATOM	235	CG	LYS	838	12.279	24.684	49.759	1.00	54.74
	ATOM	236	CD	LYS	838	11.395	25.284	48.580	1.00	61.61
	ATOM	237	CE	LYS	838	9.843	24.934	48.756	1.00	64.92
60	ATOM	238	NZ	LYS	838	9.359	25.203	50.162	1.00	66.58
	ATOM	239	HZ1	LYS	838	9.732	26.121	50.480	1.00	25.00
	ATOM	240	HZ2	LYS	838	9.725	24.460	50.793	1.00	25.00

	ATOM	241	HZ3	LYS	838	8.320	25.216	50.177	1.00	25.00
	ATOM	242	C	LYS	838	15.161	23.221	49.002	1.00	34.77
	ATOM	243	O	LYS	838	16.242	23.591	48.563	1.00	33.66
	ATOM	244	N	PRO	839	14.493	22.291	48.438	1.00	33.56
5	ATOM	245	CD	PRO	839	13.842	21.263	49.202	1.00	35.92
	ATOM	246	CA	PRO	839	14.861	21.776	47.092	1.00	33.20
	ATOM	247	CB	PRO	839	14.661	20.228	47.079	1.00	32.57
	ATOM	248	CG	PRO	839	13.617	20.106	48.169	1.00	34.28
	ATOM	249	C	PRO	839	14.161	22.406	45.916	1.00	31.60
10	ATOM	250	O	PRO	839	13.009	22.783	45.886	1.00	31.46
	ATOM	251	N	LEU	840	14.949	22.630	44.920	1.00	31.36
	ATOM	252	H	LEU	840	15.870	22.314	44.999	1.00	25.00
	ATOM	253	CA	LEU	840	14.485	23.190	43.691	1.00	29.73
	ATOM	254	CB	LEU	840	15.604	24.190	43.393	1.00	27.12
15	ATOM	255	CG	LEU	840	15.968	25.242	44.459	1.00	22.77
	ATOM	256	CD1	LEU	840	16.838	26.293	43.841	1.00	16.75
	ATOM	257	CD2	LEU	840	14.723	25.958	44.950	1.00	23.28
	ATOM	258	C	LEU	840	14.239	22.012	42.645	1.00	33.13
	ATOM	259	O	LEU	840	13.297	21.964	41.847	1.00	36.34
20	ATOM	260	N	GLY	841	15.034	20.958	42.602	1.00	33.70
	ATOM	261	H	GLY	841	15.841	20.923	43.154	1.00	25.00
	ATOM	262	CA	GLY	841	14.802	19.902	41.641	1.00	34.72
	ATOM	263	C	GLY	841	15.043	18.643	42.359	1.00	38.25
	ATOM	264	O	GLY	841	15.948	18.633	43.181	1.00	39.10
25	ATOM	265	N	ARG	842	14.333	17.561	42.109	1.00	39.98
	ATOM	266	H	ARG	842	13.615	17.548	41.443	1.00	25.00
	ATOM	267	CA	ARG	842	14.678	16.382	42.877	1.00	41.50
	ATOM	268	CB	ARG	842	13.760	16.376	44.098	1.00	45.18
	ATOM	269	CG	ARG	842	14.733	15.755	45.117	1.00	49.99
30	ATOM	270	CD	ARG	842	14.310	15.988	46.549	1.00	56.75
	ATOM	271	NE	ARG	842	15.020	14.978	47.333	1.00	66.10
	ATOM	272	HE	ARG	842	15.559	14.319	46.855	1.00	25.00
	ATOM	273	CZ	ARG	842	14.951	14.905	48.680	1.00	71.98
	ATOM	274	NH1	ARG	842	15.631	13.930	49.312	1.00	73.67
35	ATOM	275	HH11	ARG	842	16.170	13.275	48.780	1.00	25.00
	ATOM	276	HH12	ARG	842	15.622	13.873	50.312	1.00	25.00
	ATOM	277	NH2	ARG	842	14.299	15.830	49.419	1.00	74.04
	ATOM	278	HH21	ARG	842	13.846	16.599	48.974	1.00	25.00
	ATOM	279	HH22	ARG	842	14.301	15.751	50.413	1.00	25.00
40	ATOM	280	C	ARG	842	14.640	15.061	42.143	1.00	39.98
	ATOM	281	O	ARG	842	13.616	14.655	41.623	1.00	39.02
	ATOM	282	N	GLY	843	15.758	14.407	41.980	1.00	40.68
	ATOM	283	H	GLY	843	16.624	14.815	42.189	1.00	25.00
	ATOM	284	CA	GLY	843	15.667	13.111	41.289	1.00	43.15
45	ATOM	285	C	GLY	843	15.691	11.943	42.264	1.00	41.90
	ATOM	286	O	GLY	843	15.033	11.993	43.304	1.00	37.57
	ATOM	287	N	ALA	844	16.292	10.835	41.839	1.00	41.30
	ATOM	288	H	ALA	844	16.623	10.755	40.930	1.00	25.00
	ATOM	289	CA	ALA	844	16.380	9.738	42.792	1.00	42.36
50	ATOM	290	CB	ALA	844	15.880	8.463	42.015	1.00	44.08
	ATOM	291	C	ALA	844	17.841	9.660	43.357	1.00	42.17
	ATOM	292	O	ALA	844	18.146	9.350	44.504	1.00	45.45
	ATOM	293	N	PHE	845	18.857	9.943	42.590	1.00	41.90
	ATOM	294	H	PHE	845	18.710	10.195	41.651	1.00	25.00
55	ATOM	295	CA	PHE	845	20.231	9.911	43.157	1.00	41.54
	ATOM	296	CB	PHE	845	21.176	9.008	42.327	1.00	46.51
	ATOM	297	CG	PHE	845	20.444	7.768	42.064	1.00	49.94
	ATOM	298	CD1	PHE	845	20.508	7.308	40.755	1.00	52.03
	ATOM	299	CD2	PHE	845	19.622	7.161	43.031	1.00	49.62
60	ATOM	300	CE1	PHE	845	19.683	6.256	40.391	1.00	56.03
	ATOM	301	CE2	PHE	845	18.797	6.114	42.676	1.00	51.34
	ATOM	302	CZ	PHE	845	18.845	5.667	41.358	1.00	55.11

	ATOM	303	C	PHE	845	20.814	11.263	43.156	1.00	38.11
	ATOM	304	O	PHE	845	22.029	11.399	43.249	1.00	38.23
	ATOM	305	N	GLY	846	19.996	12.280	42.942	1.00	35.62
	ATOM	306	H	GLY	846	19.038	12.131	42.769	1.00	25.00
5	ATOM	307	CA	GLY	846	20.546	13.647	42.910	1.00	31.14
	ATOM	308	C	GLY	846	19.491	14.685	43.217	1.00	28.47
	ATOM	309	O	GLY	846	18.296	14.354	43.276	1.00	26.84
	ATOM	310	N	GLN	847	19.925	15.907	43.521	1.00	24.28
	ATOM	311	H	GLN	847	20.883	16.070	43.619	1.00	25.00
10	ATOM	312	CA	GLN	847	18.963	16.980	43.735	1.00	23.43
	ATOM	313	CB	GLN	847	18.288	16.892	45.121	1.00	23.43
	ATOM	314	CG	GLN	847	19.313	17.088	46.128	1.00	27.59
	ATOM	315	CD	GLN	847	18.832	16.636	47.437	1.00	31.89
	ATOM	316	OE1	GLN	847	17.690	16.858	47.810	1.00	35.85
15	ATOM	317	NE2	GLN	847	19.725	15.973	48.174	1.00	34.52
	ATOM	318	HE21	GLN	847	20.615	15.820	47.817	1.00	25.00
	ATOM	319	HE22	GLN	847	19.514	15.621	49.060	1.00	25.00
	ATOM	320	C	GLN	847	19.592	18.288	43.591	1.00	20.88
	ATOM	321	O	GLN	847	20.773	18.343	43.299	1.00	20.69
20	ATOM	322	N	VAL	848	18.777	19.350	43.491	1.00	22.04
	ATOM	323	H	VAL	848	17.796	19.226	43.447	1.00	25.00
	ATOM	324	CA	VAL	848	19.318	20.738	43.427	1.00	19.20
	ATOM	325	CB	VAL	848	19.182	21.514	42.137	1.00	16.52
	ATOM	326	CG1	VAL	848	19.678	22.991	42.202	1.00	12.88
25	ATOM	327	CG2	VAL	848	20.216	20.834	41.246	1.00	13.88
	ATOM	328	C	VAL	848	18.597	21.473	44.454	1.00	18.10
	ATOM	329	O	VAL	848	17.392	21.403	44.614	1.00	15.79
	ATOM	330	N	ILE	849	19.379	21.924	45.373	1.00	20.84
	ATOM	331	H	ILE	849	20.354	21.890	45.335	1.00	25.00
30	ATOM	332	CA	ILE	849	18.646	22.621	46.425	1.00	26.63
	ATOM	333	CB	ILE	849	18.738	21.823	47.792	1.00	25.44
	ATOM	334	CG2	ILE	849	18.189	20.394	47.610	1.00	29.87
	ATOM	335	CG1	ILE	849	20.113	21.690	48.292	1.00	21.18
	ATOM	336	CD1	ILE	849	19.398	22.131	49.599	1.00	26.55
35	ATOM	337	C	ILE	849	19.110	24.039	46.627	1.00	28.80
	ATOM	338	O	ILE	849	20.175	24.451	46.118	1.00	27.88
	ATOM	339	N	GLU	850	18.203	24.797	47.218	1.00	31.58
	ATOM	340	H	GLU	850	17.292	24.443	47.338	1.00	25.00
	ATOM	341	CA	GLU	850	18.494	26.202	47.530	1.00	33.54
40	ATOM	342	CB	GLU	850	17.191	26.964	47.674	1.00	36.15
	ATOM	343	CG	GLU	850	17.349	28.483	47.785	1.00	39.13
	ATOM	344	CD	GLU	850	15.999	29.174	47.711	1.00	41.63
	ATOM	345	OE1	GLU	850	14.924	28.536	47.704	1.00	45.62
	ATOM	346	OE2	GLU	850	16.011	30.393	47.729	1.00	42.76
45	ATOM	347	C	GLU	850	19.283	26.331	48.785	1.00	32.25
	ATOM	348	O	GLU	850	19.074	25.608	49.741	1.00	33.72
	ATOM	349	N	ALA	851	20.174	27.289	48.823	1.00	30.65
	ATOM	350	H	ALA	851	20.342	27.842	48.046	1.00	25.00
	ATOM	351	CA	ALA	851	21.015	27.522	49.972	1.00	26.57
50	ATOM	352	CB	ALA	851	22.280	26.663	49.814	1.00	22.69
	ATOM	353	C	ALA	851	21.407	28.993	49.925	1.00	26.28
	ATOM	354	O	ALA	851	21.364	29.694	48.925	1.00	26.60
	ATOM	355	N	ASP	852	21.908	29.430	51.046	1.00	26.10
	ATOM	356	H	ASP	852	21.912	28.776	51.773	1.00	25.00
55	ATOM	357	CA	ASP	852	22.471	30.759	51.388	1.00	24.66
	ATOM	358	CB	ASP	852	21.654	31.275	52.582	1.00	24.59
	ATOM	359	CG	ASP	852	20.253	31.620	52.132	1.00	22.42
	ATOM	360	OD1	ASP	852	19.380	31.811	52.944	1.00	28.50
	ATOM	361	OD2	ASP	852	19.991	31.716	50.968	1.00	25.96
60	ATOM	362	C	ASP	852	23.923	30.606	51.709	1.00	20.58
	ATOM	363	O	ASP	852	24.170	29.804	52.563	1.00	21.49
	ATOM	364	N	ALA	853	24.805	31.185	50.940	1.00	19.60

	ATOM	365	H	ALA	853	24.412	31.674	50.194	1.00	25.00
	ATOM	366	CA	ALA	853	26.219	31.172	51.056	1.00	23.85
	ATOM	367	CB	ALA	853	26.791	30.769	49.729	1.00	20.85
	ATOM	368	C	ALA	853	26.933	32.490	51.488	1.00	27.76
5	ATOM	369	O	ALA	853	27.118	33.472	50.757	1.00	28.81
	ATOM	370	N	PHE	854	27.500	32.540	52.678	1.00	31.30
	ATOM	371	H	PHE	854	27.465	31.730	53.217	1.00	25.00
	ATOM	372	CA	PHE	854	28.258	33.735	53.145	1.00	31.68
	ATOM	373	CB	PHE	854	28.598	33.625	54.609	1.00	32.24
10	ATOM	374	CG	PHE	854	28.898	34.959	55.213	1.00	32.72
	ATOM	375	CD1	PHE	854	30.212	35.380	55.514	1.00	33.25
	ATOM	376	CD2	PHE	854	27.818	35.781	55.604	1.00	32.60
	ATOM	377	CE1	PHE	854	30.418	36.609	56.208	1.00	33.17
	ATOM	378	CE2	PHE	854	28.030	36.975	56.283	1.00	28.50
15	ATOM	379	CZ	PHE	854	29.323	37.378	56.587	1.00	29.27
	ATOM	380	C	PHE	854	29.536	34.099	52.483	1.00	31.44
	ATOM	381	O	PHE	854	30.518	33.444	52.722	1.00	32.77
	ATOM	382	N	GLY	855	29.612	35.044	51.593	1.00	31.32
	ATOM	383	H	GLY	855	28.825	35.415	51.161	1.00	25.00
20	ATOM	384	CA	GLY	855	30.930	35.350	51.103	1.00	30.96
	ATOM	385	C	GLY	855	31.449	34.385	50.060	1.00	34.61
	ATOM	386	O	GLY	855	32.661	34.195	49.957	1.00	38.21
	ATOM	387	N	ILE	856	30.588	33.778	49.221	1.00	37.06
	ATOM	388	H	ILE	856	29.630	33.876	49.402	1.00	25.00
25	ATOM	389	CA	ILE	856	31.088	32.870	48.163	1.00	36.96
	ATOM	390	CB	ILE	856	29.926	31.874	47.786	1.00	30.88
	ATOM	391	CG2	ILE	856	28.647	32.548	47.291	1.00	28.31
	ATOM	392	CG1	ILE	856	30.564	30.901	46.812	1.00	26.79
	ATOM	393	CD1	ILE	856	29.816	29.571	46.746	1.00	21.97
30	ATOM	394	C	ILE	856	31.560	33.803	47.042	1.00	43.13
	ATOM	395	O	ILE	856	32.668	33.696	46.514	1.00	43.68
	ATOM	396	N	ASP	857	30.723	34.802	46.731	1.00	48.61
	ATOM	397	H	ASP	857	29.884	34.769	47.218	1.00	25.00
	ATOM	398	CA	ASP	857	30.873	35.867	45.727	1.00	52.93
35	ATOM	399	CB	ASP	857	29.474	36.453	45.534	1.00	53.63
	ATOM	1	CG	ASP	857	28.790	36.985	46.864	1.00	55.45
	ATOM	401	OD1	ASP	857	27.862	37.810	46.702	1.00	57.26
	ATOM	402	OD2	ASP	857	29.123	36.571	48.009	1.00	49.77
	ATOM	403	C	ASP	857	31.847	36.899	46.256	1.00	56.43
40	ATOM	404	O	ASP	857	31.368	37.883	46.783	1.00	56.51
	ATOM	405	N	LYS	858	33.181	36.706	46.227	1.00	60.58
	ATOM	406	H	LYS	858	33.458	35.858	45.843	1.00	25.00
	ATOM	407	CA	LYS	858	34.292	37.601	46.749	1.00	63.09
	ATOM	408	CB	LYS	858	35.310	37.824	45.615	1.00	67.42
45	ATOM	409	CG	LYS	858	34.777	37.995	44.130	1.00	73.34
	ATOM	410	CD	LYS	858	35.559	37.025	43.167	1.00	76.93
	ATOM	411	CE	LYS	858	37.144	37.179	43.208	1.00	80.28
	ATOM	412	NZ	LYS	858	37.903	35.968	42.827	1.00	80.91
	ATOM	413	HZ1	LYS	858	37.482	35.573	41.964	1.00	25.00
50	ATOM	414	HZ2	LYS	858	37.836	35.297	43.618	1.00	25.00
	ATOM	415	HZ3	LYS	858	38.902	36.226	42.683	1.00	25.00
	ATOM	416	C	LYS	858	33.899	38.981	47.387	1.00	63.18
	ATOM	417	O	LYS	858	34.070	40.147	46.933	1.00	65.03
	ATOM	418	N	THR	859	33.428	38.754	48.618	1.00	58.52
55	ATOM	419	H	THR	859	33.436	37.823	48.929	1.00	25.00
	ATOM	420	CA	THR	859	32.883	39.755	49.538	1.00	51.08
	ATOM	421	CB	THR	859	31.356	40.030	49.112	1.00	54.10
	ATOM	422	OG1	THR	859	30.790	38.749	49.380	1.00	52.30
	ATOM	423	HG1	THR	859	29.888	38.719	49.071	1.00	25.00
60	ATOM	424	CG2	THR	859	30.894	40.426	47.636	1.00	51.17
	ATOM	425	C	THR	859	32.944	39.011	50.904	1.00	45.06
	ATOM	426	O	THR	859	33.831	38.223	51.117	1.00	42.70

	ATOM	427	N	ALA	860	32.015	39.304	51.808	1.00	40.95
	ATOM	428	H	ALA	860	31.490	40.068	51.492	1.00	25.00
	ATOM	429	CA	ALA	860	31.648	38.770	53.153	1.00	37.04
	ATOM	430	CB	ALA	860	32.351	39.303	54.393	1.00	37.95
5	ATOM	431	C	ALA	860	30.211	39.321	53.285	1.00	36.01
	ATOM	432	O	ALA	860	29.795	40.003	54.224	1.00	32.58
	ATOM	433	N	THR	861	29.506	39.012	52.123	1.00	35.15
	ATOM	434	H	THR	861	30.142	38.620	51.482	1.00	25.00
	ATOM	435	CA	THR	861	28.108	39.192	51.588	1.00	32.22
10	ATOM	436	CB	THR	861	28.089	39.716	50.124	1.00	32.71
	ATOM	437	OG1	THR	861	28.792	40.923	49.950	1.00	31.34
	ATOM	438	HG1	THR	861	28.805	41.192	49.023	1.00	25.00
	ATOM	439	CG2	THR	861	26.700	40.006	49.731	1.00	34.91
	ATOM	440	C	THR	861	27.309	37.847	51.478	1.00	33.09
15	ATOM	441	O	THR	861	27.712	36.950	50.703	1.00	33.85
	ATOM	442	N	CYS	862	26.237	37.598	52.214	1.00	31.97
	ATOM	443	H	CYS	862	26.033	38.215	52.926	1.00	25.00
	ATOM	444	CA	CYS	862	25.456	36.382	52.007	1.00	32.00
	ATOM	445	CB	CYS	862	24.300	36.268	52.912	1.00	32.00
20	ATOM	446	SG	CYS	862	23.731	34.580	53.379	1.00	41.25
	ATOM	447	C	CYS	862	24.867	36.473	50.612	1.00	33.60
	ATOM	448	O	CYS	862	24.528	37.518	50.111	1.00	35.06
	ATOM	449	N	ARG	863	24.740	35.396	49.898	1.00	35.34
	ATOM	450	H	ARG	863	25.028	34.589	50.347	1.00	25.00
25	ATOM	451	CA	ARG	863	24.228	35.271	48.525	1.00	33.68
	ATOM	452	CB	ARG	863	25.561	35.485	47.866	1.00	30.81
	ATOM	453	CG	ARG	863	25.874	34.493	46.850	1.00	33.30
	ATOM	454	CD	ARG	863	25.126	34.891	45.637	1.00	34.11
	ATOM	455	NE	ARG	863	26.110	34.939	44.532	1.00	36.71
30	ATOM	456	HE	ARG	863	27.042	35.203	44.716	1.00	25.00
	ATOM	457	CZ	ARG	863	25.753	34.752	43.253	1.00	38.78
	ATOM	458	NH1	ARG	863	26.716	34.875	42.317	1.00	38.58
	ATOM	459	HH11	ARG	863	27.635	35.131	42.615	1.00	25.00
	ATOM	460	HH12	ARG	863	26.521	34.735	41.344	1.00	25.00
35	ATOM	461	NH2	ARG	863	24.504	34.313	42.947	1.00	42.39
	ATOM	462	HH21	ARG	863	23.884	34.117	43.707	1.00	25.00
	ATOM	463	HH22	ARG	863	24.250	34.134	42.004	1.00	25.00
	ATOM	464	C	ARG	863	23.418	33.889	48.319	1.00	35.03
	ATOM	465	O	ARG	863	23.820	32.820	48.796	1.00	37.13
40	ATOM	466	N	THR	864	22.183	33.804	47.777	1.00	33.98
	ATOM	467	H	THR	864	21.750	34.639	47.484	1.00	25.00
	ATOM	468	CA	THR	864	21.467	32.529	47.531	1.00	28.77
	ATOM	469	CB	THR	864	20.066	32.799	47.261	1.00	28.00
	ATOM	470	OG1	THR	864	19.713	33.584	48.410	1.00	32.63
45	ATOM	471	HG1	THR	864	18.809	33.884	48.305	1.00	25.00
	ATOM	472	CG2	THR	864	19.054	31.712	47.480	1.00	24.83
	ATOM	473	C	THR	864	22.086	31.900	46.344	1.00	29.70
	ATOM	474	O	THR	864	22.479	32.481	45.320	1.00	31.09
	ATOM	475	N	VAL	865	22.462	30.682	46.575	1.00	28.93
50	ATOM	476	H	VAL	865	22.344	30.297	47.462	1.00	25.00
	ATOM	477	CA	VAL	865	23.035	29.918	45.507	1.00	25.47
	ATOM	478	CB	VAL	865	24.483	29.602	45.878	1.00	26.31
	ATOM	479	CG1	VAL	865	25.288	30.889	46.170	1.00	22.62
	ATOM	480	CG2	VAL	865	24.470	28.690	47.091	1.00	23.92
55	ATOM	481	C	VAL	865	22.174	28.645	45.381	1.00	24.99
	ATOM	482	O	VAL	865	21.361	28.342	46.272	1.00	22.02
	ATOM	483	N	ALA	866	22.285	27.915	44.254	1.00	22.82
	ATOM	484	H	ALA	866	22.917	28.218	43.571	1.00	25.00
	ATOM	485	CA	ALA	866	21.575	26.646	44.118	1.00	22.19
60	ATOM	486	CB	ALA	866	20.921	26.610	42.816	1.00	21.17
	ATOM	487	C	ALA	866	22.645	25.521	44.160	1.00	23.74
	ATOM	488	O	ALA	866	23.675	25.534	43.456	1.00	22.51

	ATOM	489	N	VAL	867	22.555	24.537	45.028	1.00	23.89
	ATOM	490	H	VAL	867	21.790	24.478	45.588	1.00	25.00
	ATOM	491	CA	VAL	867	23.577	23.501	45.034	1.00	22.65
	ATOM	492	CB	VAL	867	24.065	23.547	46.509	1.00	22.46
5	ATOM	493	CG1	VAL	867	22.924	23.454	47.468	1.00	22.54
	ATOM	494	CG2	VAL	867	25.154	22.494	46.717	1.00	18.49
	ATOM	495	C	VAL	867	23.161	22.129	44.468	1.00	24.35
	ATOM	496	O	VAL	867	22.080	21.587	44.746	1.00	27.36
	ATOM	497	N	LYS	868	23.896	21.608	43.471	1.00	23.54
10	ATOM	498	H	LYS	868	24.640	22.103	43.076	1.00	25.00
	ATOM	499	CA	LYS	868	23.547	20.269	42.988	1.00	22.47
	ATOM	500	CB	LYS	868	23.865	20.024	41.456	1.00	22.29
	ATOM	501	CG	LYS	868	23.318	18.648	40.906	1.00	22.16
	ATOM	502	CD	LYS	868	23.922	18.296	39.582	1.00	18.73
15	ATOM	503	CE	LYS	868	23.063	18.886	38.497	1.00	19.86
	ATOM	504	NZ	LYS	868	23.692	18.694	37.181	1.00	21.99
	ATOM	505	HZ1	LYS	868	23.976	17.703	37.078	1.00	25.00
	ATOM	506	HZ2	LYS	868	24.529	19.290	37.125	1.00	25.00
	ATOM	507	HZ3	LYS	868	23.037	18.939	36.407	1.00	25.00
20	ATOM	508	C	LYS	868	24.432	19.263	43.794	1.00	22.77
	ATOM	509	O	LYS	868	25.626	19.378	43.956	1.00	21.59
	ATOM	510	N	MET	869	23.871	18.216	44.296	1.00	23.96
	ATOM	511	H	MET	869	22.890	18.165	44.181	1.00	25.00
	ATOM	512	CA	MET	869	24.612	17.140	44.973	1.00	25.30
25	ATOM	513	CB	MET	869	24.771	17.520	46.366	1.00	25.88
	ATOM	514	CG	MET	869	23.410	17.744	46.843	1.00	29.28
	ATOM	515	SD	MET	869	23.467	18.114	48.516	1.00	37.88
	ATOM	516	CE	MET	869	21.901	18.879	48.477	1.00	36.24
	ATOM	517	C	MET	869	23.797	15.814	44.854	1.00	24.97
30	ATOM	518	O	MET	869	22.658	15.763	44.390	1.00	25.57
	ATOM	519	N	LEU	870	24.340	14.684	45.258	1.00	24.82
	ATOM	520	H	LEU	870	25.241	14.743	45.621	1.00	25.00
	ATOM	521	CA	LEU	870	23.664	13.438	45.241	1.00	22.92
	ATOM	522	CB	LEU	870	24.662	12.302	45.185	1.00	23.08
35	ATOM	523	CG	LEU	870	25.551	12.307	43.996	1.00	17.43
	ATOM	524	CD1	LEU	870	26.509	11.168	44.437	1.00	15.50
	ATOM	525	CD2	LEU	870	24.768	12.436	42.624	1.00	14.61
	ATOM	526	C	LEU	870	22.773	13.190	46.393	1.00	23.17
	ATOM	527	O	LEU	870	22.782	13.671	47.477	1.00	23.91
40	ATOM	528	N	LYS	871	21.825	12.409	46.090	1.00	29.24
	ATOM	529	H	LYS	871	21.737	12.174	45.143	1.00	25.00
	ATOM	530	CA	LYS	871	20.786	11.947	47.024	1.00	32.95
	ATOM	531	CB	LYS	871	19.473	12.110	46.185	1.00	30.68
	ATOM	532	CG	LYS	871	18.507	12.796	47.073	1.00	27.85
45	ATOM	533	CD	LYS	871	17.356	12.847	46.200	1.00	29.55
	ATOM	534	CE	LYS	871	16.716	11.487	46.090	1.00	31.75
	ATOM	535	NZ	LYS	871	15.333	11.750	46.467	1.00	36.68
	ATOM	536	HZ1	LYS	871	15.013	12.621	45.995	1.00	25.00
	ATOM	537	HZ2	LYS	871	15.291	11.918	47.494	1.00	25.00
50	ATOM	538	HZ3	LYS	871	14.718	10.961	46.179	1.00	25.00
	ATOM	539	C	LYS	871	21.112	10.478	47.481	1.00	34.52
	ATOM	540	O	LYS	871	21.991	9.876	46.852	1.00	32.40
	ATOM	541	N	GLU	872	20.532	9.835	48.536	1.00	39.70
	ATOM	542	H	GLU	872	19.912	10.304	49.131	1.00	25.00
55	ATOM	543	CA	GLU	872	21.001	8.440	48.739	1.00	45.47
	ATOM	544	CB	GLU	872	20.716	7.894	50.181	1.00	47.67
	ATOM	545	CG	GLU	872	22.232	7.310	50.703	1.00	53.03
	ATOM	546	CD	GLU	872	23.645	7.043	49.842	1.00	53.05
	ATOM	547	OE1	GLU	872	23.740	6.324	48.816	1.00	51.88
60	ATOM	548	OE2	GLU	872	24.726	7.497	50.277	1.00	51.56
	ATOM	549	C	GLU	872	20.504	7.434	47.692	1.00	45.40
	ATOM	550	O	GLU	872	19.643	7.702	46.865	1.00	48.81



	ATOM	551	N	GLY	873	21.056	6.244	47.640	1.00	44.45
	ATOM	552	H	GLY	873	21.717	5.968	48.311	1.00	25.00
	ATOM	553	CA	GLY	873	20.649	5.315	46.564	1.00	43.91
	ATOM	554	C	GLY	873	21.574	5.553	45.378	1.00	42.39
5	ATOM	555	O	GLY	873	21.625	4.851	44.356	1.00	41.91
	ATOM	556	N	ALA	874	22.275	6.668	45.496	1.00	41.27
	ATOM	557	H	ALA	874	22.120	7.240	46.262	1.00	25.00
	ATOM	558	CA	ALA	874	23.263	7.029	44.513	1.00	38.10
	ATOM	559	CB	ALA	874	23.509	8.533	44.557	1.00	36.92
10	ATOM	560	C	ALA	874	24.541	6.321	44.902	1.00	36.19
	ATOM	561	O	ALA	874	24.782	5.983	46.065	1.00	35.35
	ATOM	562	N	THR	875	25.463	6.254	43.961	1.00	35.33
	ATOM	563	H	THR	875	25.280	6.598	43.066	1.00	25.00
	ATOM	564	CA	THR	875	26.729	5.655	44.268	1.00	36.04
15	ATOM	565	CB	THR	875	26.854	4.336	43.620	1.00	39.40
	ATOM	566	OG1	THR	875	26.486	4.491	42.250	1.00	39.70
	ATOM	567	HG1	THR	875	26.659	3.654	41.805	1.00	25.00
	ATOM	568	CG2	THR	875	26.058	3.305	44.452	1.00	43.09
	ATOM	569	C	THR	875	28.015	6.371	43.931	1.00	34.20
20	ATOM	570	O	THR	875	28.112	7.330	43.190	1.00	34.84
	ATOM	571	N	HIS	876	29.135	5.824	44.352	1.00	29.85
	ATOM	572	H	HIS	876	29.092	4.987	44.850	1.00	25.00
	ATOM	573	CA	HIS	876	30.367	6.475	44.094	1.00	26.33
	ATOM	574	C	HIS	876	30.549	6.750	42.694	1.00	25.95
25	ATOM	575	O	HIS	876	31.408	7.511	42.306	1.00	30.21
	ATOM	576	CB	HIS	876	31.439	5.607	44.570	1.00	21.93
	ATOM	577	CG	HIS	876	32.679	6.263	44.250	1.00	19.78
	ATOM	578	ND1	HIS	876	33.461	5.877	43.217	1.00	21.43
	ATOM	579	HD1	HIS	876	33.241	5.291	42.456	1.00	25.00
30	ATOM	580	CD2	HIS	876	33.197	7.327	44.961	1.00	18.21
	ATOM	581	NE2	HIS	876	34.344	7.600	44.345	1.00	17.17
	ATOM	582	CE1	HIS	876	34.511	6.715	43.285	1.00	20.91
	ATOM	583	N	SER	877	29.886	6.074	41.851	1.00	24.60
	ATOM	584	H	SER	877	29.229	5.413	42.101	1.00	25.00
35	ATOM	585	CA	SER	877	30.156	6.350	40.427	1.00	29.07
	ATOM	586	CB	SER	877	29.974	4.993	39.610	1.00	29.02
	ATOM	587	OG	SER	877	29.051	4.182	40.332	1.00	39.53
	ATOM	588	HG	SER	877	28.865	3.373	39.842	1.00	25.00
	ATOM	589	C	SER	877	29.338	7.538	39.905	1.00	26.02
40	ATOM	590	O	SER	877	29.696	8.168	38.950	1.00	24.46
	ATOM	591	N	GLU	878	28.215	7.820	40.522	1.00	25.87
	ATOM	592	H	GLU	878	27.938	7.236	41.251	1.00	25.00
	ATOM	593	CA	GLU	878	27.387	8.951	40.251	1.00	27.80
	ATOM	594	CB	GLU	878	26.163	8.948	41.055	1.00	31.22
45	ATOM	595	CG	GLU	878	24.879	8.758	40.289	1.00	34.27
	ATOM	596	CD	GLU	878	24.385	7.381	40.498	1.00	36.68
	ATOM	597	OE1	GLU	878	23.681	7.185	41.497	1.00	38.24
	ATOM	598	OE2	GLU	878	24.689	6.563	39.627	1.00	37.44
	ATOM	599	C	GLU	878	28.283	9.955	40.858	1.00	29.91
50	ATOM	600	O	GLU	878	28.784	10.872	40.255	1.00	34.08
	ATOM	601	N	HIS	879	28.666	9.748	42.083	1.00	30.08
	ATOM	602	H	HIS	879	28.362	8.940	42.505	1.00	25.00
	ATOM	603	CA	HIS	879	29.599	10.617	42.768	1.00	27.58
	ATOM	604	C	HIS	879	30.721	11.030	41.815	1.00	27.41
55	ATOM	605	O	HIS	879	30.935	12.204	41.516	1.00	28.47
	ATOM	606	CB	HIS	879	30.056	9.787	43.969	1.00	23.32
	ATOM	607	CG	HIS	879	31.139	10.596	44.526	1.00	16.88
	ATOM	608	ND1	HIS	879	32.380	10.799	44.108	1.00	14.29
	ATOM	609	HD1	HIS	879	32.735	10.299	43.387	1.00	25.00
60	ATOM	610	CD2	HIS	879	31.008	11.421	45.624	1.00	14.24
	ATOM	611	NE2	HIS	879	32.112	12.101	45.869	1.00	10.81
	ATOM	612	CE1	HIS	879	33.005	11.737	44.923	1.00	9.68

	ATOM	613	N	ARG	880	31.331	10.032	41.200	1.00	29.59
	ATOM	614	H	ARG	880	31.053	9.128	41.442	1.00	25.00
	ATOM	615	CA	ARG	880	32.458	10.231	40.257	1.00	28.14
	ATOM	616	CB	ARG	880	32.848	8.923	39.675	1.00	28.01
5	ATOM	617	CG	ARG	880	34.115	8.610	40.410	1.00	36.37
	ATOM	618	CD	ARG	880	35.078	7.481	39.839	1.00	43.98
	ATOM	619	NE	ARG	880	34.359	6.192	39.917	1.00	48.21
	ATOM	620	HE	ARG	880	33.454	6.180	39.533	1.00	25.00
	ATOM	621	CZ	ARG	880	34.786	4.990	40.398	1.00	49.87
10	ATOM	622	NH1	ARG	880	33.860	3.976	40.354	1.00	49.23
	ATOM	623	HH11	ARG	880	32.959	4.167	39.954	1.00	25.00
	ATOM	624	HH12	ARG	880	34.070	3.048	40.676	1.00	25.00
	ATOM	625	NH2	ARG	880	36.034	4.771	40.843	1.00	45.50
	ATOM	626	HH21	ARG	880	36.674	5.532	40.847	1.00	25.00
15	ATOM	627	HH22	ARG	880	36.285	3.868	41.204	1.00	25.00
	ATOM	628	C	ARG	880	32.176	11.202	39.112	1.00	27.17
	ATOM	629	O	ARG	880	32.968	12.092	38.781	1.00	25.36
	ATOM	630	N	ALA	881	30.964	10.997	38.569	1.00	23.27
	ATOM	631	H	ALA	881	30.434	10.245	38.878	1.00	25.00
20	ATOM	632	CA	ALA	881	30.321	11.710	37.466	1.00	21.44
	ATOM	633	CB	ALA	881	28.965	11.005	37.161	1.00	12.68
	ATOM	634	C	ALA	881	30.121	13.177	37.801	1.00	22.73
	ATOM	635	O	ALA	881	30.354	13.976	36.912	1.00	24.07
	ATOM	636	N	LEU	882	29.608	13.546	39.039	1.00	25.18
25	ATOM	637	H	LEU	882	29.433	12.780	39.650	1.00	25.00
	ATOM	638	CA	LEU	882	29.387	14.918	39.645	1.00	22.45
	ATOM	639	CB	LEU	882	28.796	14.859	41.027	1.00	18.14
	ATOM	640	CG	LEU	882	28.386	16.205	41.680	1.00	15.70
	ATOM	641	CD1	LEU	882	27.464	16.962	40.722	1.00	14.80
30	ATOM	642	CD2	LEU	882	27.654	15.989	43.008	1.00	5.10
	ATOM	643	C	LEU	882	30.789	15.445	39.791	1.00	27.06
	ATOM	644	O	LEU	882	31.044	16.547	39.301	1.00	30.55
	ATOM	645	N	MET	883	31.800	14.722	40.378	1.00	28.55
	ATOM	646	H	MET	883	31.696	13.803	40.687	1.00	25.00
35	ATOM	647	CA	MET	883	33.072	15.407	40.357	1.00	29.16
	ATOM	648	CB	MET	883	34.076	14.555	40.990	1.00	28.74
	ATOM	649	CG	MET	883	35.488	15.108	40.818	1.00	29.21
	ATOM	650	SD	MET	883	35.932	16.692	41.586	1.00	33.06
	ATOM	651	CE	MET	883	35.199	16.308	43.117	1.00	29.34
40	ATOM	652	C	MET	883	33.507	15.775	38.944	1.00	30.91
	ATOM	653	O	MET	883	34.174	16.797	38.826	1.00	34.96
	ATOM	654	N	SER	884	33.299	15.059	37.825	1.00	31.24
	ATOM	655	H	SER	884	32.818	14.194	37.815	1.00	25.00
	ATOM	656	CA	SER	884	33.800	15.727	36.616	1.00	31.09
45	ATOM	657	CB	SER	884	34.483	14.802	35.545	1.00	33.86
	ATOM	658	OG	SER	884	34.071	13.492	35.491	1.00	35.66
	ATOM	659	HG	SER	884	34.577	13.020	34.834	1.00	25.00
	ATOM	660	C	SER	884	32.728	16.605	35.919	1.00	29.32
	ATOM	661	O	SER	884	33.058	17.306	34.960	1.00	28.44
50	ATOM	662	N	GLU	885	31.444	16.674	36.334	1.00	28.74
	ATOM	663	H	GLU	885	31.151	16.061	37.047	1.00	25.00
	ATOM	664	CA	GLU	885	30.508	17.650	35.735	1.00	28.12
	ATOM	665	CB	GLU	885	29.153	17.392	36.314	1.00	26.99
	ATOM	666	CG	GLU	885	28.141	18.077	35.494	1.00	29.08
55	ATOM	667	CD	GLU	885	26.893	18.125	36.295	1.00	34.90
	ATOM	668	OE1	GLU	885	26.067	17.199	36.297	1.00	40.41
	ATOM	669	OE2	GLU	885	26.714	19.135	36.947	1.00	35.33
	ATOM	670	C	GLU	885	31.142	19.043	36.250	1.00	29.53
	ATOM	671	O	GLU	885	31.262	20.029	35.524	1.00	30.47
60	ATOM	672	N	LEU	886	31.627	19.132	37.491	1.00	26.35
	ATOM	673	H	LEU	886	31.592	18.286	37.985	1.00	25.00
	ATOM	674	CA	LEU	886	32.250	20.296	38.075	1.00	24.63

	ATOM	675	CB	LEU	886	32.659	19.925	39.402	1.00	21.61
	ATOM	676	CG	LEU	886	33.609	20.869	40.050	1.00	22.79
	ATOM	677	CD1	LEU	886	32.983	22.256	39.971	1.00	20.11
	ATOM	678	CD2	LEU	886	33.980	20.346	41.472	1.00	21.12
5	ATOM	679	C	LEU	886	33.440	20.699	37.317	1.00	27.59
	ATOM	680	O	LEU	886	33.787	21.878	37.201	1.00	29.02
	ATOM	681	N	LYS	887	34.190	19.697	36.836	1.00	30.52
	ATOM	682	H	LYS	887	33.860	18.780	36.902	1.00	25.00
	ATOM	683	CA	LYS	887	35.472	19.962	36.107	1.00	31.15
10	ATOM	684	CB	LYS	887	36.459	18.716	36.137	1.00	32.61
	ATOM	685	CG	LYS	887	37.441	18.290	37.268	1.00	31.87
	ATOM	686	CD	LYS	887	38.106	16.927	36.721	1.00	38.00
	ATOM	687	CE	LYS	887	39.178	16.157	37.666	1.00	39.62
	ATOM	688	NZ	LYS	887	40.154	15.314	36.914	1.00	37.20
15	ATOM	689	HZ1	LYS	887	40.410	15.764	36.011	1.00	25.00
	ATOM	690	HZ2	LYS	887	39.693	14.405	36.691	1.00	25.00
	ATOM	691	HZ3	LYS	887	41.025	15.160	37.461	1.00	25.00
	ATOM	692	C	LYS	887	35.250	20.351	34.657	1.00	30.98
	ATOM	693	O	LYS	887	36.094	20.990	34.013	1.00	29.50
20	ATOM	694	N	ILE	888	34.199	19.763	34.090	1.00	31.99
	ATOM	695	H	ILE	888	33.581	19.238	34.639	1.00	25.00
	ATOM	696	CA	ILE	888	33.880	20.127	32.709	1.00	33.48
	ATOM	697	CB	ILE	888	32.823	19.075	32.095	1.00	35.28
	ATOM	698	CG2	ILE	888	31.529	19.037	32.794	1.00	36.80
25	ATOM	699	CG1	ILE	888	32.379	19.570	30.687	1.00	36.48
	ATOM	700	CD1	ILE	888	33.552	19.257	29.802	1.00	42.46
	ATOM	701	C	ILE	888	33.345	21.613	32.844	1.00	31.59
	ATOM	702	O	ILE	888	33.893	22.551	32.310	1.00	30.89
	ATOM	703	N	LEU	889	32.453	21.878	33.777	1.00	29.99
30	ATOM	704	H	LEU	889	32.129	21.144	34.341	1.00	25.00
	ATOM	705	CA	LEU	889	31.906	23.202	34.029	1.00	26.04
	ATOM	706	CB	LEU	889	30.977	23.019	35.238	1.00	18.85
	ATOM	707	CG	LEU	889	29.600	22.787	35.175	1.00	13.38
	ATOM	708	CD1	LEU	889	29.128	22.810	36.542	1.00	10.99
35	ATOM	709	CD2	LEU	889	28.884	23.933	34.474	1.00	20.29
	ATOM	710	C	LEU	889	33.087	24.179	34.287	1.00	29.06
	ATOM	711	O	LEU	889	33.065	25.334	33.888	1.00	30.19
	ATOM	712	N	ILE	890	34.174	23.766	34.943	1.00	31.75
	ATOM	713	H	ILE	890	34.162	22.861	35.279	1.00	25.00
40	ATOM	714	CA	ILE	890	35.285	24.702	35.222	1.00	30.73
	ATOM	715	CB	ILE	890	36.333	24.131	36.294	1.00	30.59
	ATOM	716	CG2	ILE	890	37.483	25.185	36.501	1.00	27.96
	ATOM	717	CG1	ILE	890	35.733	23.929	37.737	1.00	26.44
	ATOM	718	CD1	ILE	890	36.944	23.291	38.468	1.00	25.74
45	ATOM	719	C	ILE	890	35.969	24.940	33.927	1.00	32.11
	ATOM	720	O	ILE	890	36.615	25.963	33.691	1.00	32.66
	ATOM	721	N	HIS	891	35.959	23.937	33.061	1.00	32.83
	ATOM	722	H	HIS	891	35.628	23.049	33.296	1.00	25.00
	ATOM	723	CA	HIS	891	36.605	24.093	31.744	1.00	33.25
50	ATOM	724	C	HIS	891	35.830	24.908	30.639	1.00	30.46
	ATOM	725	O	HIS	891	36.431	25.625	29.840	1.00	29.67
	ATOM	726	CB	HIS	891	36.964	22.673	31.223	1.00	35.75
	ATOM	727	CG	HIS	891	37.293	22.757	29.769	1.00	41.04
	ATOM	728	ND1	HIS	891	38.560	23.076	29.323	1.00	39.93
55	ATOM	729	CE1	HIS	891	38.385	22.922	27.948	1.00	44.65
	ATOM	730	CD2	HIS	891	36.364	22.436	28.686	1.00	41.99
	ATOM	731	NE2	HIS	891	37.077	22.546	27.562	1.00	43.11
	ATOM	732	HE2	HIS	891	36.784	22.465	26.653	1.00	25.00
	ATOM	733	N	ILE	892	34.554	24.627	30.460	1.00	27.41
60	ATOM	734	H	ILE	892	34.156	24.000	31.108	1.00	25.00
	ATOM	735	CA	ILE	892	33.710	25.358	29.498	1.00	28.16
	ATOM	736	CB	ILE	892	32.299	24.999	29.814	1.00	23.20

	ATOM	737	CG2	ILE	892	31.384	25.790	28.885	1.00	21.75
	ATOM	738	CG1	ILE	892	32.130	23.426	29.695	1.00	21.79
	ATOM	739	CD1	ILE	892	30.668	22.852	30.000	1.00	12.96
	ATOM	740	C	ILE	892	34.000	26.897	29.771	1.00	29.86
5	ATOM	741	O	ILE	892	34.478	27.672	28.944	1.00	31.34
	ATOM	742	N	GLY	893	33.751	27.399	30.987	1.00	30.73
	ATOM	743	H	GLY	893	33.440	26.774	31.678	1.00	25.00
	ATOM	744	CA	GLY	893	34.056	28.808	31.384	1.00	28.58
	ATOM	745	C	GLY	893	32.863	29.706	31.647	1.00	30.62
10	ATOM	746	O	GLY	893	31.707	29.271	31.780	1.00	30.86
	ATOM	747	N	HIS	894	33.123	31.002	31.830	1.00	28.79
	ATOM	748	H	HIS	894	34.028	31.359	31.785	1.00	25.00
	ATOM	749	CA	HIS	894	31.975	31.898	32.070	1.00	27.99
	ATOM	750	C	HIS	894	31.192	32.336	30.859	1.00	25.65
15	ATOM	751	O	HIS	894	31.760	32.564	29.792	1.00	27.42
	ATOM	752	CB	HIS	894	32.454	33.161	32.809	1.00	27.91
	ATOM	753	CG	HIS	894	31.325	34.076	33.138	1.00	28.10
	ATOM	754	ND1	HIS	894	30.953	35.225	32.431	1.00	24.54
	ATOM	755	CE1	HIS	894	29.865	35.720	33.132	1.00	24.46
20	ATOM	756	CD2	HIS	894	30.471	33.894	34.237	1.00	27.92
	ATOM	757	NE2	HIS	894	29.565	34.912	34.229	1.00	28.64
	ATOM	758	HE2	HIS	894	28.835	35.049	34.858	1.00	25.00
	ATOM	759	N	HIS	895	29.887	32.421	31.021	1.00	21.32
	ATOM	760	H	HIS	895	29.484	32.005	31.833	1.00	25.00
25	ATOM	761	CA	HIS	895	29.059	32.932	29.966	1.00	16.61
	ATOM	762	C	HIS	895	27.842	33.254	30.674	1.00	18.03
	ATOM	763	O	HIS	895	27.481	32.675	31.697	1.00	18.61
	ATOM	764	CB	HIS	895	28.761	31.988	28.797	1.00	14.85
	ATOM	765	CG	HIS	895	28.106	32.699	27.627	1.00	12.22
30	ATOM	766	ND1	HIS	895	26.849	33.249	27.590	1.00	12.84
	ATOM	767	CE1	HIS	895	26.622	33.926	26.412	1.00	15.46
	ATOM	768	CD2	HIS	895	28.639	33.085	26.415	1.00	10.38
	ATOM	769	NE2	HIS	895	27.756	33.816	25.686	1.00	11.92
	ATOM	770	HE2	HIS	895	27.889	34.159	24.786	1.00	25.00
35	ATOM	771	N	LEU	896	27.406	34.461	30.296	1.00	18.90
	ATOM	772	H	LEU	896	27.882	34.965	29.608	1.00	25.00
	ATOM	773	CA	LEU	896	26.200	34.991	30.883	1.00	19.38
	ATOM	774	CB	LEU	896	25.802	36.265	30.179	1.00	20.38
	ATOM	775	CG	LEU	896	24.400	36.931	30.544	1.00	23.00
40	ATOM	776	CD1	LEU	896	24.567	37.741	31.769	1.00	22.60
	ATOM	777	CD2	LEU	896	23.927	38.058	29.612	1.00	23.89
	ATOM	778	C	LEU	896	25.053	34.036	30.765	1.00	19.79
	ATOM	779	O	LEU	896	24.084	34.021	31.548	1.00	22.07
	ATOM	780	N	ASN	897	25.090	33.304	29.652	1.00	19.51
45	ATOM	781	H	ASN	897	25.796	33.467	29.026	1.00	25.00
	ATOM	782	CA	ASN	897	23.999	32.362	29.311	1.00	20.37
	ATOM	783	CB	ASN	897	23.671	32.733	27.856	1.00	23.52
	ATOM	784	CG	ASN	897	22.986	34.179	27.826	1.00	19.30
	ATOM	785	OD1	ASN	897	23.408	35.072	27.086	1.00	15.81
50	ATOM	786	ND2	ASN	897	21.955	34.425	28.600	1.00	9.84
	ATOM	787	HD21	ASN	897	21.607	33.723	29.174	1.00	25.00
	ATOM	788	HD22	ASN	897	21.522	35.302	28.585	1.00	25.00
	ATOM	789	C	ASN	897	24.046	30.904	29.570	1.00	17.49
	ATOM	790	O	ASN	897	23.126	30.178	29.305	1.00	15.04
55	ATOM	791	N	VAL	898	25.089	30.500	30.208	1.00	19.45
	ATOM	792	H	VAL	898	25.824	31.123	30.152	1.00	25.00
	ATOM	793	CA	VAL	898	25.230	29.139	30.762	1.00	20.42
	ATOM	794	CB	VAL	898	26.497	28.448	30.295	1.00	17.94
	ATOM	795	CG1	VAL	898	26.406	28.346	28.813	1.00	17.47
60	ATOM	796	CG2	VAL	898	27.686	29.255	30.258	1.00	27.90
	ATOM	797	C	VAL	898	25.223	29.319	32.299	1.00	17.73
	ATOM	798	O	VAL	898	26.093	30.052	32.698	1.00	18.12

	ATOM	799	N	VAL	899	24.299	28.767	33.115	1.00	16.89
	ATOM	800	H	VAL	899	23.667	28.142	32.694	1.00	25.00
	ATOM	801	CA	VAL	899	24.207	28.938	34.570	1.00	19.83
	ATOM	802	CB	VAL	899	23.310	27.826	35.243	1.00	18.01
5	ATOM	803	CG1	VAL	899	23.912	26.398	34.998	1.00	18.61
	ATOM	804	CG2	VAL	899	23.143	28.200	36.771	1.00	14.95
	ATOM	805	C	VAL	899	25.596	28.923	35.112	1.00	25.05
	ATOM	806	O	VAL	899	26.373	27.996	34.865	1.00	30.47
	ATOM	807	N	ASN	900	25.979	29.921	35.920	1.00	26.67
10	ATOM	808	H	ASN	900	25.322	30.564	36.239	1.00	25.00
	ATOM	809	CA	ASN	900	27.385	30.058	36.379	1.00	24.86
	ATOM	810	CB	ASN	900	27.735	31.705	36.533	1.00	35.53
	ATOM	811	CG	ASN	900	27.575	32.456	35.171	1.00	43.56
	ATOM	812	OD1	ASN	900	28.421	32.219	34.324	1.00	51.26
15	ATOM	813	ND2	ASN	900	26.707	33.394	34.846	1.00	43.70
	ATOM	814	HD21	ASN	900	26.001	33.817	35.411	1.00	25.00
	ATOM	815	HD22	ASN	900	26.846	33.605	33.902	1.00	25.00
	ATOM	816	C	ASN	900	27.765	29.330	37.584	1.00	20.50
	ATOM	817	O	ASN	900	26.985	29.373	38.532	1.00	19.39
20	ATOM	818	N	LEU	901	28.995	28.834	37.568	1.00	18.94
	ATOM	819	H	LEU	901	29.498	28.938	36.726	1.00	25.00
	ATOM	820	CA	LEU	901	29.674	28.113	38.705	1.00	19.97
	ATOM	821	CB	LEU	901	30.765	27.149	38.078	1.00	15.79
	ATOM	822	CG	LEU	901	31.901	26.471	38.869	1.00	15.10
25	ATOM	823	CD1	LEU	901	31.290	25.510	39.870	1.00	16.96
	ATOM	824	CD2	LEU	901	32.874	25.770	37.933	1.00	13.24
	ATOM	825	C	LEU	901	30.307	29.133	39.694	1.00	20.43
	ATOM	826	O	LEU	901	31.171	29.937	39.325	1.00	23.64
	ATOM	827	N	LEU	902	29.790	29.141	40.902	1.00	19.61
30	ATOM	828	H	LEU	902	29.062	28.499	41.004	1.00	25.00
	ATOM	829	CA	LEU	902	30.167	29.906	42.085	1.00	19.28
	ATOM	830	CB	LEU	902	29.039	30.039	42.963	1.00	16.95
	ATOM	831	CG	LEU	902	28.058	31.002	42.303	1.00	15.93
	ATOM	832	CD1	LEU	902	27.179	31.595	43.352	1.00	19.17
35	ATOM	833	CD2	LEU	902	28.768	32.241	41.744	1.00	19.91
	ATOM	834	C	LEU	902	31.232	29.174	42.864	1.00	25.70
	ATOM	835	O	LEU	902	32.292	29.690	43.252	1.00	27.86
	ATOM	836	N	GLY	903	31.040	27.915	43.221	1.00	28.05
	ATOM	837	H	GLY	903	30.231	27.444	43.019	1.00	25.00
40	ATOM	838	CA	GLY	903	32.162	27.187	43.913	1.00	28.51
	ATOM	839	C	GLY	903	31.839	25.744	44.202	1.00	29.91
	ATOM	840	O	GLY	903	30.900	25.223	43.589	1.00	32.39
	ATOM	841	N	ALA	904	32.598	25.001	45.028	1.00	31.75
	ATOM	842	H	ALA	904	33.451	25.355	45.342	1.00	25.00
45	ATOM	843	CA	ALA	904	32.202	23.592	45.416	1.00	30.05
	ATOM	844	CB	ALA	904	32.726	22.482	44.514	1.00	29.37
	ATOM	845	C	ALA	904	32.717	23.126	46.723	1.00	28.90
	ATOM	846	O	ALA	904	33.824	23.462	47.145	1.00	30.19
	ATOM	847	N	CYS	905	31.917	22.300	47.349	1.00	29.43
50	ATOM	848	H	CYS	905	30.979	22.187	47.049	1.00	25.00
	ATOM	849	CA	CYS	905	32.312	21.627	48.585	1.00	27.11
	ATOM	850	CB	CYS	905	31.154	21.501	49.480	1.00	27.19
	ATOM	851	SG	CYS	905	30.577	23.110	49.892	1.00	26.51
	ATOM	852	C	CYS	905	32.808	20.218	48.249	1.00	28.76
55	ATOM	853	O	CYS	905	32.045	19.272	48.150	1.00	28.03
	ATOM	854	N	THR	906	34.053	20.129	47.855	1.00	31.77
	ATOM	855	H	THR	906	34.584	20.963	47.768	1.00	25.00
	ATOM	856	CA	THR	906	34.735	18.817	47.510	1.00	35.53
	ATOM	857	CB	THR	906	35.731	19.177	46.403	1.00	33.82
60	ATOM	858	OG1	THR	906	34.920	19.644	45.356	1.00	38.29
	ATOM	859	HG1	THR	906	35.484	19.904	44.625	1.00	25.00
	ATOM	860	CG2	THR	906	36.589	18.088	45.877	1.00	37.36

	ATOM	861	C	THR	906	35.496	17.991	48.636	1.00	38.55
	ATOM	862	O	THR	906	35.969	16.839	48.451	1.00	36.84
	ATOM	863	N	LYS	907	35.674	18.632	49.832	1.00	40.74
	ATOM	864	H	LYS	907	35.214	19.492	49.989	1.00	25.00
5	ATOM	865	CA	LYS	907	36.553	18.042	50.870	1.00	40.42
	ATOM	866	CB	LYS	907	36.912	19.135	51.960	1.00	39.21
	ATOM	867	C	LYS	907	36.052	16.791	51.515	1.00	42.10
	ATOM	868	O	LYS	907	34.860	16.539	51.551	1.00	39.53
	ATOM	869	N	PRO	908	37.002	15.956	51.993	1.00	41.69
10	ATOM	870	CD	PRO	908	38.467	16.086	51.820	1.00	39.65
	ATOM	871	CA	PRO	908	36.646	14.589	52.282	1.00	38.81
	ATOM	872	CB	PRO	908	38.055	14.084	52.511	1.00	40.86
	ATOM	873	CG	PRO	908	38.778	14.719	51.350	1.00	38.24
	ATOM	874	C	PRO	908	35.563	14.129	53.258	1.00	38.21
15	ATOM	875	O	PRO	908	34.777	13.203	52.944	1.00	38.86
	ATOM	876	N	GLY	909	35.397	14.733	54.407	1.00	36.78
	ATOM	877	H	GLY	909	35.852	15.553	54.682	1.00	25.00
	ATOM	878	CA	GLY	909	34.322	14.113	55.242	1.00	36.67
	ATOM	879	C	GLY	909	32.885	14.446	54.818	1.00	35.83
20	ATOM	880	O	GLY	909	31.939	14.694	55.599	1.00	36.42
	ATOM	881	N	GLY	910	32.633	14.443	53.521	1.00	35.31
	ATOM	882	H	GLY	910	33.210	14.048	52.829	1.00	25.00
	ATOM	883	CA	GLY	910	31.266	14.797	53.125	1.00	30.42
	ATOM	884	C	GLY	910	31.023	14.813	51.658	1.00	27.60
25	ATOM	885	O	GLY	910	31.889	14.568	50.792	1.00	28.33
	ATOM	886	N	PRO	911	29.806	15.203	51.436	1.00	25.68
	ATOM	887	CD	PRO	911	29.008	15.990	52.364	1.00	25.39
	ATOM	888	CA	PRO	911	29.150	15.027	50.145	1.00	25.05
	ATOM	889	CB	PRO	911	27.691	15.157	50.487	1.00	25.02
30	ATOM	890	CG	PRO	911	27.651	15.461	51.999	1.00	26.91
	ATOM	891	C	PRO	911	29.561	15.994	49.051	1.00	24.74
	ATOM	892	O	PRO	911	29.504	17.153	49.332	1.00	30.61
	ATOM	893	N	LEU	912	29.949	15.732	47.804	1.00	23.23
	ATOM	894	H	LEU	912	29.914	14.792	47.562	1.00	25.00
35	ATOM	895	CA	LEU	912	30.252	16.776	46.810	1.00	20.49
	ATOM	896	CB	LEU	912	30.709	16.107	45.648	1.00	19.77
	ATOM	897	CG	LEU	912	31.110	16.788	44.412	1.00	19.97
	ATOM	898	CD1	LEU	912	32.297	17.605	44.579	1.00	13.85
	ATOM	899	CD2	LEU	912	31.501	15.607	43.408	1.00	20.09
40	ATOM	900	C	LEU	912	29.001	17.568	46.473	1.00	22.67
	ATOM	901	O	LEU	912	27.867	17.157	46.234	1.00	23.53
	ATOM	902	N	MET	913	29.271	18.856	46.470	1.00	22.84
	ATOM	903	H	MET	913	30.140	19.069	46.865	1.00	25.00
	ATOM	904	CA	MET	913	28.352	19.950	46.237	1.00	17.94
45	ATOM	905	CB	MET	913	28.232	20.520	47.585	1.00	14.19
	ATOM	906	CG	MET	913	27.284	19.601	48.299	1.00	12.86
	ATOM	907	SD	MET	913	27.325	20.499	49.776	1.00	23.04
	ATOM	908	CE	MET	913	25.729	20.269	50.362	1.00	16.35
	ATOM	909	C	MET	913	28.934	20.881	45.168	1.00	20.06
50	ATOM	910	O	MET	913	30.044	21.385	45.276	1.00	20.36
	ATOM	911	N	VAL	914	28.211	21.170	44.070	1.00	21.14
	ATOM	912	H	VAL	914	27.320	20.794	44.055	1.00	25.00
	ATOM	913	CA	VAL	914	28.604	22.059	42.876	1.00	18.64
	ATOM	914	CB	VAL	914	28.380	21.229	41.524	1.00	20.20
55	ATOM	915	CG1	VAL	914	28.894	21.897	40.270	1.00	19.79
	ATOM	916	CG2	VAL	914	29.172	19.920	41.674	1.00	16.97
	ATOM	917	C	VAL	914	27.614	23.235	43.016	1.00	16.15
	ATOM	918	O	VAL	914	26.384	23.100	43.013	1.00	9.92
	ATOM	919	N	ILE	915	28.193	24.341	43.535	1.00	18.42
60	ATOM	920	H	ILE	915	29.182	24.367	43.576	1.00	25.00
	ATOM	921	CA	ILE	915	27.392	25.573	43.832	1.00	18.11
	ATOM	922	CB	ILE	915	27.980	26.206	45.174	1.00	16.93

	ATOM	923	CG2	ILE	915	27.077	27.396	45.585	1.00	14.95
	ATOM	924	CG1	ILE	915	27.851	25.252	46.430	1.00	14.66
	ATOM	925	CD1	ILE	915	29.176	25.426	47.165	1.00	9.89
	ATOM	926	C	ILE	915	27.345	26.563	42.635	1.00	18.08
5	ATOM	927	O	ILE	915	28.380	27.000	42.111	1.00	18.40
	ATOM	928	N	VAL	916	26.126	26.738	42.073	1.00	16.69
	ATOM	929	H	VAL	916	25.344	26.304	42.468	1.00	25.00
	ATOM	930	CA	VAL	916	25.968	27.611	40.947	1.00	14.59
	ATOM	931	CB	VAL	916	25.360	26.831	39.639	1.00	16.42
10	ATOM	932	CG1	VAL	916	26.429	25.915	38.858	1.00	14.26
	ATOM	933	CG2	VAL	916	24.083	26.163	40.112	1.00	14.36
	ATOM	934	C	VAL	916	25.050	28.735	41.353	1.00	12.51
	ATOM	935	O	VAL	916	24.337	28.622	42.379	1.00	9.55
	ATOM	936	N	GLU	917	25.170	29.867	40.622	1.00	13.92
15	ATOM	937	H	GLU	917	25.810	29.911	39.863	1.00	25.00
	ATOM	938	CA	GLU	917	24.194	31.002	40.932	1.00	17.96
	ATOM	939	CB	GLU	917	24.346	32.008	39.831	1.00	20.40
	ATOM	940	CG	GLU	917	23.729	31.442	38.546	1.00	20.95
	ATOM	941	CD	GLU	917	23.745	32.607	37.651	1.00	23.60
20	ATOM	942	OE1	GLU	917	24.612	32.734	36.805	1.00	25.18
	ATOM	943	OE2	GLU	917	22.937	33.475	37.829	1.00	23.69
	ATOM	944	C	GLU	917	22.673	30.619	41.008	1.00	19.23
	ATOM	945	O	GLU	917	22.231	29.704	40.330	1.00	22.71
	ATOM	946	N	PHE	918	21.812	31.217	41.814	1.00	19.61
25	ATOM	947	H	PHE	918	22.174	31.906	42.412	1.00	25.00
	ATOM	948	CA	PHE	918	20.427	30.826	41.891	1.00	15.46
	ATOM	949	CB	PHE	918	19.968	31.005	43.307	1.00	15.60
	ATOM	950	CG	PHE	918	18.544	30.809	43.621	1.00	16.12
	ATOM	951	CD1	PHE	918	18.007	29.588	43.754	1.00	15.46
30	ATOM	952	CD2	PHE	918	17.716	31.887	43.892	1.00	18.48
	ATOM	953	CE1	PHE	918	16.667	29.471	44.153	1.00	15.56
	ATOM	954	CE2	PHE	918	16.388	31.810	44.294	1.00	13.68
	ATOM	955	CZ	PHE	918	15.862	30.552	44.423	1.00	15.51
	ATOM	956	C	PHE	918	19.584	31.674	40.958	1.00	20.84
35	ATOM	957	O	PHE	918	19.574	32.887	41.015	1.00	22.86
	ATOM	958	N	CYS	919	18.701	31.002	40.146	1.00	24.67
	ATOM	959	H	CYS	919	18.773	30.057	40.350	1.00	25.00
	ATOM	960	CA	CYS	919	17.704	31.395	39.104	1.00	18.54
	ATOM	961	CB	CYS	919	17.856	30.408	37.965	1.00	8.24
40	ATOM	962	SG	CYS	919	19.415	30.597	37.184	1.00	17.14
	ATOM	963	C	CYS	919	16.288	31.397	39.713	1.00	20.79
	ATOM	964	O	CYS	919	15.504	30.427	39.723	1.00	19.09
	ATOM	965	N	LYS	920	15.982	32.659	40.157	1.00	24.06
	ATOM	966	H	LYS	920	16.664	33.360	40.093	1.00	25.00
45	ATOM	967	CA	LYS	920	14.714	32.965	40.877	1.00	28.12
	ATOM	968	CB	LYS	920	14.376	34.469	41.038	1.00	31.72
	ATOM	969	CG	LYS	920	14.673	35.092	42.365	1.00	41.66
	ATOM	970	CD	LYS	920	16.275	35.120	42.604	1.00	50.37
	ATOM	971	CE	LYS	920	16.993	35.837	43.845	1.00	52.49
50	ATOM	972	NZ	LYS	920	18.462	35.494	43.887	1.00	57.05
	ATOM	973	HZ1	LYS	920	18.878	35.618	42.939	1.00	25.00
	ATOM	974	HZ2	LYS	920	18.630	34.513	44.191	1.00	25.00
	ATOM	975	HZ3	LYS	920	18.958	36.121	44.546	1.00	25.00
	ATOM	976	C	LYS	920	13.472	32.494	40.217	1.00	29.65
55	ATOM	977	O	LYS	920	12.534	32.181	40.963	1.00	29.39
	ATOM	978	N	PHE	921	13.371	32.678	38.844	1.00	28.19
	ATOM	979	H	PHE	921	14.135	32.923	38.268	1.00	25.00
	ATOM	980	CA	PHE	921	12.099	32.285	38.148	1.00	30.76
	ATOM	981	CB	PHE	921	11.881	33.227	36.847	1.00	32.02
60	ATOM	982	CG	PHE	921	11.873	34.553	37.452	1.00	35.37
	ATOM	983	CD1	PHE	921	10.854	34.950	38.383	1.00	37.21
	ATOM	984	CD2	PHE	921	12.937	35.449	37.136	1.00	36.75

	ATOM	985	CE1	PHE	921	11.017	36.183	39.098	1.00	37.21
	ATOM	986	CE2	PHE	921	13.100	36.669	37.834	1.00	35.67
	ATOM	987	CZ	PHE	921	12.109	37.046	38.774	1.00	33.19
	ATOM	988	C	PHE	921	11.855	30.798	37.730	1.00	29.64
5	ATOM	989	O	PHE	921	10.858	30.436	37.099	1.00	30.71
	ATOM	990	N	GLY	922	12.755	29.940	38.132	1.00	26.21
	ATOM	991	H	GLY	922	13.501	30.300	38.675	1.00	25.00
	ATOM	992	CA	GLY	922	12.606	28.561	37.785	1.00	23.78
	ATOM	993	C	GLY	922	12.996	28.369	36.365	1.00	23.63
10	ATOM	994	O	GLY	922	13.779	29.148	35.854	1.00	22.46
	ATOM	995	N	ASN	923	12.636	27.228	35.763	1.00	26.68
	ATOM	996	H	ASN	923	12.158	26.631	36.357	1.00	25.00
	ATOM	997	CA	ASN	923	12.912	26.876	34.352	1.00	25.76
	ATOM	998	CB	ASN	923	12.975	25.307	34.262	1.00	25.38
15	ATOM	999	CG	ASN	923	11.750	24.614	34.814	1.00	26.84
	ATOM	1000	OD1	ASN	923	10.631	24.644	34.364	1.00	33.94
	ATOM	1001	ND2	ASN	923	11.616	24.155	35.987	1.00	32.02
	ATOM	1002	HD21	ASN	923	12.284	24.222	36.693	1.00	25.00
	ATOM	1003	HD22	ASN	923	10.771	23.732	36.191	1.00	25.00
20	ATOM	1004	C	ASN	923	11.845	27.513	33.447	1.00	26.34
	ATOM	1005	O	ASN	923	10.695	27.804	33.776	1.00	21.54
	ATOM	1006	N	LEU	924	12.220	27.779	32.261	1.00	26.55
	ATOM	1007	H	LEU	924	13.101	27.554	31.951	1.00	25.00
	ATOM	1008	CA	LEU	924	11.363	28.424	31.344	1.00	29.33
25	ATOM	1009	CB	LEU	924	12.153	28.587	30.063	1.00	29.04
	ATOM	1010	CG	LEU	924	12.280	29.909	29.333	1.00	27.24
	ATOM	1011	CD1	LEU	924	12.564	31.066	30.231	1.00	25.66
	ATOM	1012	CD2	LEU	924	13.355	29.692	28.333	1.00	26.87
	ATOM	1013	C	LEU	924	10.096	27.646	31.126	1.00	32.23
30	ATOM	1014	O	LEU	924	9.022	28.200	31.298	1.00	37.86
	ATOM	1015	N	SER	925	10.071	26.408	30.743	1.00	32.25
	ATOM	1016	H	SER	925	10.959	25.987	30.639	1.00	25.00
	ATOM	1017	CA	SER	925	8.816	25.667	30.515	1.00	28.04
	ATOM	1018	CB	SER	925	9.143	24.200	30.416	1.00	31.83
35	ATOM	1019	OG	SER	925	9.887	23.664	31.559	1.00	27.82
	ATOM	1020	HG	SER	925	9.933	22.717	31.575	1.00	25.00
	ATOM	1021	C	SER	925	7.772	25.863	31.571	1.00	29.30
	ATOM	1022	O	SER	925	6.622	26.006	31.174	1.00	31.02
	ATOM	1023	N	THR	926	8.043	25.860	32.907	1.00	28.53
40	ATOM	1024	H	THR	926	8.957	25.681	33.252	1.00	25.00
	ATOM	1025	CA	THR	926	6.966	26.129	33.922	1.00	27.45
	ATOM	1026	CB	THR	926	7.461	25.780	35.355	1.00	28.37
	ATOM	1027	OG1	THR	926	7.998	24.502	35.282	1.00	30.93
	ATOM	1028	HG1	THR	926	8.301	24.282	36.167	1.00	25.00
45	ATOM	1029	CG2	THR	926	6.383	25.482	36.401	1.00	27.02
	ATOM	1030	C	THR	926	6.525	27.582	33.900	1.00	26.26
	ATOM	1031	O	THR	926	5.374	27.950	33.992	1.00	28.17
	ATOM	1032	N	TYR	927	7.488	28.442	33.756	1.00	27.50
	ATOM	1033	H	TYR	927	8.384	28.038	33.660	1.00	25.00
50	ATOM	1034	CA	TYR	927	7.345	29.919	33.694	1.00	27.56
	ATOM	1035	CB	TYR	927	8.748	30.667	33.565	1.00	30.80
	ATOM	1036	CG	TYR	927	8.499	32.103	33.572	1.00	31.81
	ATOM	1037	CD1	TYR	927	7.844	32.562	34.702	1.00	33.71
	ATOM	1038	CE1	TYR	927	7.601	33.934	34.881	1.00	35.75
55	ATOM	1039	CD2	TYR	927	8.914	33.002	32.567	1.00	32.25
	ATOM	1040	CE2	TYR	927	8.674	34.388	32.735	1.00	35.54
	ATOM	1041	CZ	TYR	927	8.012	34.853	33.909	1.00	36.98
	ATOM	1042	OH	TYR	927	7.811	36.188	34.219	1.00	36.57
	ATOM	1043	HH	TYR	927	8.165	36.735	33.511	1.00	25.00
60	ATOM	1044	C	TYR	927	6.523	30.316	32.519	1.00	25.01
	ATOM	1045	O	TYR	927	5.503	30.923	32.781	1.00	25.33
	ATOM	1046	N	LEU	928	6.944	30.086	31.289	1.00	21.20



	ATOM	1047	H	LEU	928	7.876	29.814	31.144	1.00	25.00
	ATOM	1048	CA	LEU	928	6.077	30.462	30.211	1.00	22.72
	ATOM	1049	CB	LEU	928	6.661	30.032	28.936	1.00	22.10
	ATOM	1050	CG	LEU	928	7.869	30.885	28.543	1.00	23.43
5	ATOM	1051	CD1	LEU	928	8.640	30.200	27.427	1.00	24.59
	ATOM	1052	CD2	LEU	928	7.455	32.161	27.825	1.00	26.33
	ATOM	1053	C	LEU	928	4.719	29.863	30.350	1.00	26.13
	ATOM	1054	O	LEU	928	3.690	30.485	30.081	1.00	29.10
	ATOM	1055	N	ARG	929	4.547	28.685	30.917	1.00	31.09
10	ATOM	1056	H	ARG	929	5.262	28.171	31.330	1.00	25.00
	ATOM	1057	CA	ARG	929	3.133	28.140	30.993	1.00	33.63
	ATOM	1058	CB	ARG	929	3.159	26.586	31.275	1.00	35.07
	ATOM	1059	CG	ARG	929	2.167	25.451	30.789	1.00	39.72
	ATOM	1060	CD	ARG	929	3.104	24.080	30.814	1.00	47.07
15	ATOM	1061	NE	ARG	929	3.829	23.605	32.092	1.00	49.01
	ATOM	1062	HE	ARG	929	3.301	23.682	32.918	1.00	25.00
	ATOM	1063	CZ	ARG	929	5.118	23.145	32.187	1.00	45.25
	ATOM	1064	NH1	ARG	929	5.652	22.746	33.373	1.00	40.92
	ATOM	1065	HH11	ARG	929	5.077	22.813	34.191	1.00	25.00
20	ATOM	1066	HH12	ARG	929	6.604	22.465	33.473	1.00	25.00
	ATOM	1067	NH2	ARG	929	5.845	23.191	31.090	1.00	45.30
	ATOM	1068	HH21	ARG	929	5.442	23.523	30.238	1.00	25.00
	ATOM	1069	HH22	ARG	929	6.798	22.898	31.129	1.00	25.00
	ATOM	1070	C	ARG	929	2.287	28.846	32.027	1.00	33.85
25	ATOM	1071	O	ARG	929	1.041	28.736	32.149	1.00	35.17
	ATOM	1072	N	SER	930	2.966	29.578	32.898	1.00	35.91
	ATOM	1073	H	SER	930	3.937	29.716	32.773	1.00	25.00
	ATOM	1074	CA	SER	930	2.199	30.348	33.990	1.00	37.28
	ATOM	1075	CB	SER	930	2.961	30.469	35.328	1.00	34.96
30	ATOM	1076	OG	SER	930	4.214	31.161	35.065	1.00	32.16
	ATOM	1077	HG	SER	930	4.670	31.323	35.896	1.00	25.00
	ATOM	1078	C	SER	930	1.842	31.818	33.596	1.00	38.36
	ATOM	1079	O	SER	930	0.960	32.459	34.150	1.00	38.66
	ATOM	1080	N	LYS	931	2.509	32.370	32.570	1.00	38.87
35	ATOM	1081	H	LYS	931	3.168	31.787	32.128	1.00	25.00
	ATOM	1082	CA	LYS	931	2.346	33.714	32.021	1.00	39.53
	ATOM	1083	CB	LYS	931	3.727	34.094	31.591	1.00	40.92
	ATOM	1084	CG	LYS	931	4.694	34.221	32.752	1.00	39.55
	ATOM	1085	CD	LYS	931	4.075	35.224	33.780	1.00	41.00
40	ATOM	1086	CE	LYS	931	4.310	36.709	33.330	1.00	39.36
	ATOM	1087	NZ	LYS	931	4.808	36.765	31.936	1.00	39.26
	ATOM	1088	HZ1	LYS	931	4.181	36.207	31.333	1.00	25.00
	ATOM	1089	HZ2	LYS	931	5.790	36.426	31.866	1.00	25.00
	ATOM	1090	HZ3	LYS	931	4.759	37.749	31.596	1.00	25.00
45	ATOM	1091	C	LYS	931	1.361	33.774	30.858	1.00	41.94
	ATOM	1092	O	LYS	931	1.283	34.720	30.063	1.00	43.49
	ATOM	1093	N	ARG	932	0.562	32.727	30.784	1.00	42.67
	ATOM	1094	H	ARG	932	0.651	32.065	31.505	1.00	25.00
	ATOM	1095	CA	ARG	932	-0.423	32.548	29.734	1.00	40.67
50	ATOM	1096	CB	ARG	932	-1.157	31.214	29.991	1.00	35.92
	ATOM	1097	CG	ARG	932	-0.396	30.026	29.360	1.00	32.12
	ATOM	1098	CD	ARG	932	-0.351	29.896	27.871	1.00	27.19
	ATOM	1099	NE	ARG	932	0.502	28.740	27.438	1.00	26.92
	ATOM	1100	HE	ARG	932	1.455	28.907	27.274	1.00	25.00
55	ATOM	1101	CZ	ARG	932	0.047	27.524	27.168	1.00	24.63
	ATOM	1102	NH1	ARG	932	0.833	26.584	26.733	1.00	22.28
	ATOM	1103	HH11	ARG	932	1.808	26.759	26.571	1.00	25.00
	ATOM	1104	HH12	ARG	932	0.447	25.675	26.560	1.00	25.00
	ATOM	1105	NH2	ARG	932	-1.212	27.237	27.298	1.00	24.07
60	ATOM	1106	HH21	ARG	932	-1.830	27.954	27.613	1.00	25.00
	ATOM	1107	HH22	ARG	932	-1.556	26.317	27.126	1.00	25.00
	ATOM	1108	C	ARG	932	-1.346	33.725	29.795	1.00	43.62

	ATOM	1109	O	ARG	932	-1.593	34.483	28.850	1.00	45.89
	ATOM	1110	N	ASN	933	-1.835	33.906	30.993	1.00	45.70
	ATOM	1111	H	ASN	933	-1.602	33.269	31.704	1.00	25.00
	ATOM	1112	CA	ASN	933	-2.791	35.004	31.242	1.00	45.46
5	ATOM	1113	CB	ASN	933	-3.332	34.684	32.587	1.00	46.72
	ATOM	1114	CG	ASN	933	-4.604	35.381	32.756	1.00	46.41
	ATOM	1115	OD1	ASN	933	-5.226	35.819	31.804	1.00	49.99
	ATOM	1116	ND2	ASN	933	-5.067	35.450	33.957	1.00	47.69
	ATOM	1117	HD21	ASN	933	-4.589	35.046	34.700	1.00	25.00
10	ATOM	1118	HD22	ASN	933	-5.920	35.907	34.086	1.00	25.00
	ATOM	1119	C	ASN	933	-2.154	36.379	31.224	1.00	45.37
	ATOM	1120	O	ASN	933	-2.813	37.390	31.423	1.00	48.59
	ATOM	1121	N	GLU	934	-0.820	36.422	31.082	1.00	42.02
	ATOM	1122	H	GLU	934	-0.347	35.617	30.766	1.00	25.00
15	ATOM	1123	CA	GLU	934	-0.069	37.656	31.150	1.00	37.06
	ATOM	1124	CB	GLU	934	0.633	37.690	32.587	1.00	36.65
	ATOM	1125	CG	GLU	934	-0.178	37.046	33.774	1.00	38.96
	ATOM	1126	CD	GLU	934	0.444	37.051	35.209	1.00	41.32
	ATOM	1127	OE1	GLU	934	-0.352	37.252	36.139	1.00	42.69
20	ATOM	1128	OE2	GLU	934	1.660	36.846	35.413	1.00	43.89
	ATOM	1129	C	GLU	934	0.924	37.784	30.023	1.00	34.23
	ATOM	1130	O	GLU	934	2.108	38.032	30.263	1.00	37.60
	ATOM	1131	N	PHE	935	0.440	37.796	28.831	1.00	28.95
	ATOM	1132	H	PHE	935	-0.526	37.811	28.758	1.00	25.00
25	ATOM	1133	CA	PHE	935	1.211	37.935	27.588	1.00	27.28
	ATOM	1134	CB	PHE	935	1.433	36.639	26.806	1.00	23.84
	ATOM	1135	CG	PHE	935	2.154	36.719	25.515	1.00	15.84
	ATOM	1136	CD1	PHE	935	1.522	36.704	24.334	1.00	17.66
	ATOM	1137	CD2	PHE	935	3.498	36.701	25.517	1.00	16.28
30	ATOM	1138	CE1	PHE	935	2.238	36.653	23.116	1.00	19.26
	ATOM	1139	CE2	PHE	935	4.237	36.650	24.350	1.00	19.65
	ATOM	1140	CZ	PHE	935	3.610	36.620	23.128	1.00	18.42
	ATOM	1141	C	PHE	935	0.436	38.781	26.579	1.00	27.65
	ATOM	1142	O	PHE	935	-0.797	38.766	26.503	1.00	26.46
35	ATOM	1143	N	VAL	936	1.175	39.561	25.825	1.00	28.19
	ATOM	1144	H	VAL	936	2.151	39.584	25.953	1.00	25.00
	ATOM	1145	CA	VAL	936	0.599	40.382	24.778	1.00	30.16
	ATOM	1146	CB	VAL	936	0.222	41.716	25.271	1.00	32.30
	ATOM	1147	CG1	VAL	936	-1.227	41.494	25.799	1.00	31.05
40	ATOM	1148	CG2	VAL	936	1.398	42.380	26.171	1.00	32.81
	ATOM	1149	C	VAL	936	1.708	40.575	23.815	1.00	29.97
	ATOM	1150	O	VAL	936	2.887	40.592	24.199	1.00	32.17
	ATOM	1151	N	PRO	937	1.400	40.567	22.562	1.00	30.90
	ATOM	1152	CD	PRO	937	0.132	40.158	21.940	1.00	29.99
45	ATOM	1153	CA	PRO	937	2.528	40.669	21.673	1.00	33.41
	ATOM	1154	CB	PRO	937	1.971	40.228	20.304	1.00	34.43
	ATOM	1155	CG	PRO	937	0.690	39.520	20.648	1.00	29.52
	ATOM	1156	C	PRO	937	3.152	42.034	21.670	1.00	37.27
	ATOM	1157	O	PRO	937	4.282	42.164	21.224	1.00	37.70
50	ATOM	1158	N	TYR	938	2.295	43.001	21.970	1.00	40.37
	ATOM	1159	H	TYR	938	1.390	42.730	22.215	1.00	25.00
	ATOM	1160	CA	TYR	938	2.568	44.436	22.015	1.00	50.77
	ATOM	1161	CB	TYR	938	1.184	45.112	22.009	1.00	46.09
	ATOM	1162	C	TYR	938	3.439	44.824	23.212	1.00	62.66
55	ATOM	1163	O	TYR	938	2.914	45.214	24.272	1.00	65.20
	ATOM	1165	CB	PHE	999	3.911	40.787	32.454	1.00	50.06
	ATOM	1166	CG	PHE	999	4.046	41.729	33.563	1.00	56.91
	ATOM	1167	CD1	PHE	999	3.582	41.330	34.811	1.00	59.28
	ATOM	1168	CD2	PHE	999	4.485	43.046	33.391	1.00	59.39
60	ATOM	1169	CE1	PHE	999	3.534	42.222	35.878	1.00	59.75
	ATOM	1170	CE2	PHE	999	4.434	43.942	34.450	1.00	61.40
	ATOM	1171	CZ	PHE	999	3.950	43.522	35.681	1.00	59.81

	ATOM	1172	C	PHE	999	4.617	41.020	30.226	1.00	44.80
	ATOM	1173	O	PHE	999	5.624	41.688	29.880	1.00	46.35
	ATOM	1174	HT1	PHE	999	1.816	40.773	30.310	1.00	25.00
	ATOM	1175	HT2	PHE	999	1.997	42.448	30.098	1.00	25.00
5	ATOM	1176	N	PHE	999	2.118	41.655	30.772	1.00	46.13
	ATOM	1177	HT3	PHE	999	1.537	41.873	31.612	1.00	25.00
	ATOM	1178	CA	PHE	999	3.582	41.587	31.169	1.00	46.04
	ATOM	1179	N	LEU	1000	4.401	39.728	29.883	1.00	40.30
	ATOM	1180	H	LEU	1000	3.573	39.258	30.089	1.00	25.00
10	ATOM	1181	CA	LEU	1000	5.337	39.093	28.955	1.00	33.94
	ATOM	1182	CB	LEU	1000	5.165	37.627	29.102	1.00	38.42
	ATOM	1183	CG	LEU	1000	6.350	36.647	28.887	1.00	40.19
	ATOM	1184	CD1	LEU	1000	7.575	37.081	29.693	1.00	37.92
	ATOM	1185	CD2	LEU	1000	5.909	35.244	29.326	1.00	39.38
15	ATOM	1186	C	LEU	1000	4.983	39.560	27.625	1.00	28.82
	ATOM	1187	O	LEU	1000	3.863	39.971	27.350	1.00	26.90
	ATOM	1188	N	THR	1001	5.850	39.495	26.732	1.00	26.58
	ATOM	1189	H	THR	1001	6.705	39.079	26.899	1.00	25.00
	ATOM	1190	CA	THR	1001	5.508	39.985	25.378	1.00	28.24
20	ATOM	1191	CB	THR	1001	5.746	41.592	25.140	1.00	25.50
	ATOM	1192	OG1	THR	1001	7.175	41.778	25.114	1.00	26.31
	ATOM	1193	HG1	THR	1001	7.307	42.724	25.007	1.00	25.00
	ATOM	1194	CG2	THR	1001	5.136	42.535	26.155	1.00	20.62
	ATOM	1195	C	THR	1001	6.428	39.270	24.429	1.00	28.34
25	ATOM	1196	O	THR	1001	7.408	38.651	24.825	1.00	28.92
	ATOM	1197	N	LEU	1002	6.204	39.335	23.157	1.00	31.10
	ATOM	1198	H	LEU	1002	5.393	39.816	22.929	1.00	25.00
	ATOM	1199	CA	LEU	1002	6.996	38.707	22.062	1.00	31.54
	ATOM	1200	CB	LEU	1002	6.135	39.045	20.924	1.00	34.22
30	ATOM	1201	CG	LEU	1002	6.407	38.956	19.470	1.00	38.11
	ATOM	1202	CD1	LEU	1002	6.842	37.562	18.989	1.00	41.61
	ATOM	1203	CD2	LEU	1002	5.038	39.381	18.860	1.00	40.25
	ATOM	1204	C	LEU	1002	8.372	39.216	22.028	1.00	34.73
	ATOM	1205	O	LEU	1002	9.280	38.704	21.372	1.00	35.66
35	ATOM	1206	N	GLU	1003	8.611	40.278	22.800	1.00	38.18
	ATOM	1207	H	GLU	1003	7.871	40.668	23.312	1.00	25.00
	ATOM	1208	CA	GLU	1003	9.935	40.924	22.842	1.00	36.59
	ATOM	1209	CB	GLU	1003	9.652	42.204	23.578	1.00	40.28
	ATOM	1210	CG	GLU	1003	10.772	43.185	23.158	1.00	49.51
40	ATOM	1211	CD	GLU	1003	10.943	44.527	23.915	1.00	52.50
	ATOM	1212	OE1	GLU	1003	9.991	45.033	24.583	1.00	52.80
	ATOM	1213	OE2	GLU	1003	12.080	45.009	23.756	1.00	54.01
	ATOM	1214	C	GLU	1003	10.891	39.995	23.551	1.00	34.20
	ATOM	1215	O	GLU	1003	11.925	39.596	23.025	1.00	34.55
45	ATOM	1216	N	HIS	1004	10.427	39.600	24.780	1.00	31.99
	ATOM	1217	H	HIS	1004	9.597	40.048	25.054	1.00	25.00
	ATOM	1218	CA	HIS	1004	11.045	38.700	25.828	1.00	26.95
	ATOM	1219	C	HIS	1004	11.403	37.484	25.159	1.00	21.98
	ATOM	1220	O	HIS	1004	12.537	37.226	24.882	1.00	19.89
50	ATOM	1221	CB	HIS	1004	10.007	38.479	26.863	1.00	30.00
	ATOM	1222	CG	HIS	1004	9.784	39.667	27.635	1.00	34.94
	ATOM	1223	ND1	HIS	1004	10.677	40.250	28.432	1.00	36.29
	ATOM	1224	HD1	HIS	1004	11.638	40.162	28.512	1.00	25.00
	ATOM	1225	CD2	HIS	1004	8.510	40.160	27.940	1.00	40.01
55	ATOM	1226	NE2	HIS	1004	8.589	41.040	28.963	1.00	39.46
	ATOM	1227	CE1	HIS	1004	9.932	41.073	29.236	1.00	39.90
	ATOM	1228	N	LEU	1005	10.358	36.908	24.607	1.00	18.57
	ATOM	1229	H	LEU	1005	9.488	37.354	24.690	1.00	25.00
	ATOM	1230	CA	LEU	1005	10.420	35.675	23.787	1.00	16.30
60	ATOM	1231	CB	LEU	1005	9.015	35.385	23.169	1.00	15.28
	ATOM	1232	CG	LEU	1005	8.078	34.541	24.044	1.00	14.59
	ATOM	1233	CD1	LEU	1005	7.852	35.030	25.413	1.00	15.50

	ATOM	1234	CD2	LEU	1005	6.729	34.655	23.521	1.00	13.43
	ATOM	1235	C	LEU	1005	11.466	35.772	22.756	1.00	17.98
	ATOM	1236	O	LEU	1005	12.279	34.866	22.581	1.00	23.32
	ATOM	1237	N	ILE	1006	11.641	36.790	21.988	1.00	20.25
5	ATOM	1238	H	ILE	1006	11.134	37.613	22.123	1.00	25.00
	ATOM	1239	CA	ILE	1006	12.803	36.716	21.041	1.00	20.94
	ATOM	1240	CB	ILE	1006	12.751	37.826	19.994	1.00	23.73
	ATOM	1241	CG2	ILE	1006	13.727	37.376	18.895	1.00	22.08
	ATOM	1242	CG1	ILE	1006	11.305	38.082	19.466	1.00	25.59
10	ATOM	1243	CD1	ILE	1006	11.069	39.126	18.311	1.00	25.20
	ATOM	1244	C	ILE	1006	14.133	36.920	21.791	1.00	21.52
	ATOM	1245	O	ILE	1006	15.282	36.604	21.320	1.00	22.23
	ATOM	1246	N	CYS	1007	13.995	37.609	22.966	1.00	20.01
	ATOM	1247	H	CYS	1007	13.093	37.915	23.199	1.00	25.00
15	ATOM	1248	CA	CYS	1007	15.168	37.930	23.854	1.00	20.59
	ATOM	1249	CB	CYS	1007	14.882	38.903	25.214	1.00	16.76
	ATOM	1250	SG	CYS	1007	16.553	39.639	25.409	1.00	22.27
	ATOM	1251	C	CYS	1007	15.617	36.546	24.308	1.00	18.11
	ATOM	1252	O	CYS	1007	16.646	36.144	23.785	1.00	21.75
20	ATOM	1253	N	TYR	1008	14.850	35.715	25.104	1.00	15.16
	ATOM	1254	H	TYR	1008	13.978	36.074	25.344	1.00	25.00
	ATOM	1255	CA	TYR	1008	15.190	34.299	25.600	1.00	9.03
	ATOM	1256	CB	TYR	1008	13.882	33.827	26.069	1.00	6.13
	ATOM	1257	CG	TYR	1008	13.329	34.597	27.193	1.00	2.61
25	ATOM	1258	CD1	TYR	1008	11.989	34.525	27.380	1.00	3.77
	ATOM	1259	CE1	TYR	1008	11.355	35.152	28.439	1.00	7.46
	ATOM	1260	CD2	TYR	1008	14.034	35.364	28.093	1.00	4.41
	ATOM	1261	CE2	TYR	1008	13.411	36.003	29.191	1.00	5.86
	ATOM	1262	CZ	TYR	1008	12.056	35.894	29.343	1.00	8.77
30	ATOM	1263	OH	TYR	1008	11.314	36.513	30.373	1.00	13.26
	ATOM	1264	HH	TYR	1008	10.370	36.325	30.382	1.00	25.00
	ATOM	1265	C	TYR	1008	15.799	33.469	24.470	1.00	11.40
	ATOM	1266	O	TYR	1008	16.969	33.135	24.437	1.00	12.48
	ATOM	1267	N	SER	1009	15.194	33.422	23.301	1.00	13.91
35	ATOM	1268	H	SER	1009	14.336	33.876	23.236	1.00	25.00
	ATOM	1269	CA	SER	1009	15.641	32.696	22.077	1.00	15.24
	ATOM	1270	CB	SER	1009	14.620	32.946	20.984	1.00	15.99
	ATOM	1271	OG	SER	1009	13.285	32.786	21.486	1.00	17.04
	ATOM	1272	HG	SER	1009	12.646	32.969	20.804	1.00	25.00
40	ATOM	1273	C	SER	1009	16.989	33.162	21.692	1.00	19.41
	ATOM	1274	O	SER	1009	17.944	32.359	21.555	1.00	19.76
	ATOM	1275	N	PHE	1010	17.116	34.502	21.433	1.00	21.84
	ATOM	1276	H	PHE	1010	16.338	35.072	21.532	1.00	25.00
	ATOM	1277	CA	PHE	1010	18.480	35.132	21.155	1.00	22.03
45	ATOM	1278	CB	PHE	1010	18.369	36.683	21.356	1.00	21.52
	ATOM	1279	CG	PHE	1010	19.724	37.263	21.107	1.00	24.69
	ATOM	1280	CD1	PHE	1010	20.343	38.024	22.130	1.00	23.08
	ATOM	1281	CD2	PHE	1010	20.337	37.167	19.810	1.00	25.60
	ATOM	1282	CE1	PHE	1010	21.571	38.679	21.793	1.00	24.48
50	ATOM	1283	CE2	PHE	1010	21.562	37.837	19.495	1.00	27.05
	ATOM	1284	CZ	PHE	1010	22.177	38.608	20.497	1.00	25.56
	ATOM	1285	C	PHE	1010	19.516	34.584	22.260	1.00	21.86
	ATOM	1286	O	PHE	1010	20.531	33.903	22.013	1.00	18.72
	ATOM	1287	N	GLN	1011	19.187	34.812	23.582	1.00	20.28
55	ATOM	1288	H	GLN	1011	18.318	35.220	23.779	1.00	25.00
	ATOM	1289	CA	GLN	1011	20.052	34.419	24.699	1.00	21.13
	ATOM	1290	CB	GLN	1011	19.287	34.876	25.978	1.00	21.09
	ATOM	1291	CG	GLN	1011	19.216	36.430	26.135	1.00	20.85
	ATOM	1292	CD	GLN	1011	18.649	36.623	27.497	1.00	19.91
60	ATOM	1293	OE1	GLN	1011	19.190	36.291	28.536	1.00	27.17
	ATOM	1294	NE2	GLN	1011	17.412	36.978	27.616	1.00	22.53
	ATOM	1295	HE21	GLN	1011	16.817	37.128	26.859	1.00	25.00

	ATOM	1296	HE22	GLN	1011	17.061	37.098	28.517	1.00	25.00
	ATOM	1297	C	GLN	1011	20.430	32.909	24.658	1.00	21.79
	ATOM	1298	O	GLN	1011	21.623	32.554	24.681	1.00	22.26
	ATOM	1299	N	VAL	1012	19.466	31.978	24.578	1.00	20.36
5	ATOM	1300	H	VAL	1012	18.545	32.264	24.511	1.00	25.00
	ATOM	1301	CA	VAL	1012	19.847	30.561	24.487	1.00	20.58
	ATOM	1302	CB	VAL	1012	18.596	29.730	24.367	1.00	21.56
	ATOM	1303	CG1	VAL	1012	19.075	28.295	24.528	1.00	23.59
	ATOM	1304	CG2	VAL	1012	17.645	29.906	25.544	1.00	21.17
10	ATOM	1305	C	VAL	1012	20.769	30.374	23.304	1.00	19.42
	ATOM	1306	O	VAL	1012	21.835	29.802	23.405	1.00	21.92
	ATOM	1307	N	ALA	1013	20.558	31.088	22.217	1.00	21.02
	ATOM	1308	H	ALA	1013	19.751	31.667	22.202	1.00	25.00
	ATOM	1309	CA	ALA	1013	21.436	30.957	21.028	1.00	19.71
15	ATOM	1310	CB	ALA	1013	20.833	31.754	19.942	1.00	17.77
	ATOM	1311	C	ALA	1013	22.786	31.414	21.294	1.00	21.10
	ATOM	1312	O	ALA	1013	23.794	30.849	20.884	1.00	21.39
	ATOM	1313	N	LYS	1014	22.916	32.466	22.031	1.00	22.32
	ATOM	1314	H	LYS	1014	22.111	32.864	22.407	1.00	25.00
20	ATOM	1315	CA	LYS	1014	24.279	32.952	22.322	1.00	22.07
	ATOM	1316	CB	LYS	1014	23.995	34.430	22.867	1.00	25.93
	ATOM	1317	CG	LYS	1014	24.245	35.510	21.744	1.00	26.62
	ATOM	1318	CD	LYS	1014	25.242	36.634	22.112	1.00	29.40
	ATOM	1319	CE	LYS	1014	26.802	36.344	22.120	1.00	33.74
25	ATOM	1320	NZ	LYS	1014	27.609	35.741	23.261	1.00	30.83
	ATOM	1321	HZ1	LYS	1014	27.138	34.860	23.545	1.00	25.00
	ATOM	1322	HZ2	LYS	1014	27.686	36.394	24.066	1.00	25.00
	ATOM	1323	HZ3	LYS	1014	28.545	35.535	22.874	1.00	25.00
	ATOM	1324	C	LYS	1014	25.010	31.921	23.242	1.00	21.66
30	ATOM	1325	O	LYS	1014	26.190	31.540	23.028	1.00	16.43
	ATOM	1326	N	GLY	1015	24.253	31.460	24.305	1.00	21.50
	ATOM	1327	H	GLY	1015	23.330	31.783	24.322	1.00	25.00
	ATOM	1328	CA	GLY	1015	24.718	30.390	25.269	1.00	21.58
	ATOM	1329	C	GLY	1015	25.228	29.070	24.500	1.00	23.60
35	ATOM	1330	O	GLY	1015	26.390	28.607	24.615	1.00	21.95
	ATOM	1331	N	MET	1016	24.339	28.453	23.629	1.00	21.75
	ATOM	1332	H	MET	1016	23.404	28.738	23.631	1.00	25.00
	ATOM	1333	CA	MET	1016	24.686	27.281	22.819	1.00	20.82
	ATOM	1334	CB	MET	1016	23.591	26.867	22.014	1.00	25.04
40	ATOM	1335	CG	MET	1016	22.374	26.344	22.836	1.00	26.53
	ATOM	1336	SD	MET	1016	23.009	25.128	23.975	1.00	28.20
	ATOM	1337	CE	MET	1016	23.911	23.845	22.990	1.00	33.62
	ATOM	1338	C	MET	1016	25.776	27.584	21.912	1.00	24.61
	ATOM	1339	O	MET	1016	26.670	26.822	21.633	1.00	29.24
45	ATOM	1340	N	GLU	1017	25.782	28.712	21.283	1.00	28.84
	ATOM	1341	H	GLU	1017	25.020	29.327	21.394	1.00	25.00
	ATOM	1342	CA	GLU	1017	26.945	29.115	20.428	1.00	26.22
	ATOM	1343	CB	GLU	1017	26.642	30.547	19.895	1.00	27.35
	ATOM	1344	CG	GLU	1017	27.949	31.164	19.351	1.00	30.88
50	ATOM	1345	CD	GLU	1017	27.932	32.642	18.985	1.00	34.09
	ATOM	1346	OE1	GLU	1017	27.755	33.552	19.838	1.00	32.99
	ATOM	1347	OE2	GLU	1017	28.191	32.835	17.798	1.00	34.33
	ATOM	1348	C	GLU	1017	28.270	29.096	21.287	1.00	25.43
	ATOM	1349	O	GLU	1017	29.341	28.571	20.937	1.00	24.24
55	ATOM	1350	N	PHE	1018	28.235	29.758	22.488	1.00	25.50
	ATOM	1351	H	PHE	1018	27.409	30.216	22.734	1.00	25.00
	ATOM	1352	CA	PHE	1018	29.391	29.763	23.438	1.00	25.56
	ATOM	1353	CB	PHE	1018	29.035	30.318	24.817	1.00	22.17
	ATOM	1354	CG	PHE	1018	30.127	30.232	25.793	1.00	21.51
60	ATOM	1355	CD1	PHE	1018	29.871	29.597	26.995	1.00	21.46
	ATOM	1356	CD2	PHE	1018	31.390	30.714	25.531	1.00	17.70
	ATOM	1357	CE1	PHE	1018	30.883	29.443	27.907	1.00	15.64

	ATOM	1358	CE2	PHE	1018	32.421	30.560	26.464	1.00	16.81
	ATOM	1359	CZ	PHE	1018	32.168	29.912	27.655	1.00	16.54
	ATOM	1360	C	PHE	1018	29.717	28.283	23.693	1.00	27.54
	ATOM	1361	O	PHE	1018	30.871	27.942	23.506	1.00	28.16
5	ATOM	1362	N	LEU	1019	28.751	27.429	24.123	1.00	25.20
	ATOM	1363	H	LEU	1019	27.879	27.816	24.252	1.00	25.00
	ATOM	1364	CA	LEU	1019	28.977	26.001	24.425	1.00	25.82
	ATOM	1365	CB	LEU	1019	27.567	25.364	24.784	1.00	22.92
	ATOM	1366	CG	LEU	1019	27.244	25.710	26.267	1.00	18.39
10	ATOM	1367	CD1	LEU	1019	26.032	25.048	26.855	1.00	14.71
	ATOM	1368	CD2	LEU	1019	28.369	25.064	27.067	1.00	21.21
	ATOM	1369	C	LEU	1019	29.681	25.347	23.290	1.00	27.06
	ATOM	1370	O	LEU	1019	30.832	24.933	23.303	1.00	26.86
	ATOM	1371	N	ALA	1020	29.056	25.399	22.167	1.00	29.66
15	ATOM	1372	H	ALA	1020	28.189	25.858	22.126	1.00	25.00
	ATOM	1373	CA	ALA	1020	29.668	24.835	20.884	1.00	33.24
	ATOM	1374	CB	ALA	1020	28.941	25.375	19.625	1.00	32.45
	ATOM	1375	C	ALA	1020	31.148	25.151	20.645	1.00	35.18
	ATOM	1376	O	ALA	1020	31.980	24.365	20.202	1.00	37.67
20	ATOM	1377	N	SER	1021	31.523	26.386	20.884	1.00	38.55
	ATOM	1378	H	SER	1021	30.883	27.001	21.308	1.00	25.00
	ATOM	1379	CA	SER	1021	32.921	26.843	20.673	1.00	38.05
	ATOM	1380	CB	SER	1021	32.927	28.437	20.874	1.00	37.42
	ATOM	1381	OG	SER	1021	32.998	28.967	22.230	1.00	33.65
25	ATOM	1382	HG	SER	1021	33.049	29.926	22.190	1.00	25.00
	ATOM	1383	C	SER	1021	33.925	26.145	21.600	1.00	38.01
	ATOM	1384	O	SER	1021	35.116	25.942	21.292	1.00	39.52
	ATOM	1385	N	ARG	1022	33.389	25.850	22.789	1.00	35.96
	ATOM	1386	H	ARG	1022	32.454	26.050	22.970	1.00	25.00
30	ATOM	1387	CA	ARG	1022	34.161	25.235	23.838	1.00	36.56
	ATOM	1388	CB	ARG	1022	33.409	25.397	25.134	1.00	34.23
	ATOM	1389	CG	ARG	1022	33.223	26.909	25.400	1.00	32.65
	ATOM	1390	CD	ARG	1022	34.274	27.724	26.151	1.00	29.05
	ATOM	1391	NE	ARG	1022	35.448	27.553	25.398	1.00	27.20
35	ATOM	1392	HE	ARG	1022	35.417	27.783	24.448	1.00	25.00
	ATOM	1393	CZ	ARG	1022	36.520	27.056	25.909	1.00	28.23
	ATOM	1394	NH1	ARG	1022	37.513	26.902	25.051	1.00	31.11
	ATOM	1395	HH11	ARG	1022	37.370	27.128	24.090	1.00	25.00
	ATOM	1396	HH12	ARG	1022	38.403	26.524	25.312	1.00	25.00
40	ATOM	1397	NH2	ARG	1022	36.655	26.761	27.166	1.00	25.35
	ATOM	1398	HH21	ARG	1022	35.903	26.948	27.783	1.00	25.00
	ATOM	1399	HH22	ARG	1022	37.527	26.404	27.482	1.00	25.00
	ATOM	1400	C	ARG	1022	34.474	23.736	23.585	1.00	38.64
	ATOM	1401	O	ARG	1022	35.091	23.128	24.360	1.00	39.29
45	ATOM	1402	N	LYS	1023	33.909	23.297	22.412	1.00	39.78
	ATOM	1403	H	LYS	1023	33.445	24.057	22.082	1.00	25.00
	ATOM	1404	CA	LYS	1023	33.739	22.048	21.633	1.00	39.06
	ATOM	1405	CB	LYS	1023	35.056	21.243	21.472	1.00	38.70
	ATOM	1406	CG	LYS	1023	36.022	21.938	20.636	1.00	43.18
50	ATOM	1407	CD	LYS	1023	37.048	22.666	21.540	1.00	50.71
	ATOM	1408	CE	LYS	1023	38.410	23.052	20.827	1.00	55.05
	ATOM	1409	NZ	LYS	1023	38.072	23.610	19.464	1.00	62.01
	ATOM	1410	HZ1	LYS	1023	37.262	24.265	19.526	1.00	25.00
	ATOM	1411	HZ2	LYS	1023	37.842	22.835	18.809	1.00	25.00
55	ATOM	1412	HZ3	LYS	1023	38.886	24.121	19.069	1.00	25.00
	ATOM	1413	C	LYS	1023	32.745	21.234	22.475	1.00	38.01
	ATOM	1414	O	LYS	1023	32.973	20.071	22.776	1.00	41.13
	ATOM	1415	N	CYS	1024	31.496	21.645	22.695	1.00	33.05
	ATOM	1416	H	CYS	1024	31.119	22.436	22.224	1.00	25.00
60	ATOM	1417	CA	CYS	1024	30.737	20.825	23.637	1.00	31.74
	ATOM	1418	CB	CYS	1024	30.559	21.423	25.040	1.00	31.61
	ATOM	1419	SG	CYS	1024	32.069	21.406	26.098	1.00	44.63

	ATOM	1420	C	CYS	1024	29.447	20.611	23.212	1.00	32.42
	ATOM	1421	O	CYS	1024	28.951	21.387	22.453	1.00	34.99
	ATOM	1422	N	ILE	1025	28.801	19.626	23.741	1.00	33.27
	ATOM	1423	H	ILE	1025	29.186	19.089	24.460	1.00	25.00
5	ATOM	1424	CA	ILE	1025	27.479	19.367	23.292	1.00	33.30
	ATOM	1425	CB	ILE	1025	27.711	18.420	21.999	1.00	37.18
	ATOM	1426	CG2	ILE	1025	29.134	18.231	21.495	1.00	38.21
	ATOM	1427	CG1	ILE	1025	27.301	17.037	22.316	1.00	42.22
	ATOM	1428	CD1	ILE	1025	25.990	17.068	21.406	1.00	45.78
10	ATOM	1429	C	ILE	1025	26.651	18.887	24.456	1.00	30.64
	ATOM	1430	O	ILE	1025	27.079	17.964	25.133	1.00	34.55
	ATOM	1431	N	HIS	1026	25.507	19.588	24.620	1.00	26.01
	ATOM	1432	H	HIS	1026	25.350	20.207	23.874	1.00	25.00
	ATOM	1433	CA	HIS	1026	24.495	19.471	25.665	1.00	26.50
15	ATOM	1434	C	HIS	1026	23.663	18.160	25.726	1.00	29.77
	ATOM	1435	O	HIS	1026	23.490	17.556	26.805	1.00	34.32
	ATOM	1436	CB	HIS	1026	23.542	20.681	25.568	1.00	20.89
	ATOM	1437	CG	HIS	1026	22.694	20.759	26.819	1.00	20.25
	ATOM	1438	ND1	HIS	1026	21.545	20.070	27.125	1.00	23.32
20	ATOM	1439	CE1	HIS	1026	20.917	20.526	28.297	1.00	19.96
	ATOM	1440	CD2	HIS	1026	22.766	21.671	27.870	1.00	21.28
	ATOM	1441	NE2	HIS	1026	21.706	21.533	28.728	1.00	22.34
	ATOM	1442	HE2	HIS	1026	21.651	21.956	29.624	1.00	25.00
	ATOM	1443	N	ARG	1027	23.075	17.700	24.586	1.00	29.80
25	ATOM	1444	H	ARG	1027	23.206	18.200	23.749	1.00	25.00
	ATOM	1445	CA	ARG	1027	22.284	16.434	24.464	1.00	28.23
	ATOM	1446	CB	ARG	1027	23.218	15.228	24.949	1.00	32.11
	ATOM	1447	CG	ARG	1027	24.468	14.937	24.056	1.00	34.57
	ATOM	1448	CD	ARG	1027	25.467	13.966	24.669	1.00	40.62
30	ATOM	1449	NE	ARG	1027	26.816	14.534	24.457	1.00	48.49
	ATOM	1450	HE	ARG	1027	27.007	15.475	24.651	1.00	25.00
	ATOM	1451	CZ	ARG	1027	27.867	13.790	24.040	1.00	52.05
	ATOM	1452	NH1	ARG	1027	29.092	14.379	23.869	1.00	54.51
	ATOM	1453	HH11	ARG	1027	29.221	15.350	24.084	1.00	25.00
35	ATOM	1454	HH12	ARG	1027	29.873	13.823	23.550	1.00	25.00
	ATOM	1455	NH2	ARG	1027	27.726	12.474	23.753	1.00	53.39
	ATOM	1456	HH21	ARG	1027	26.841	12.008	23.822	1.00	25.00
	ATOM	1457	HH22	ARG	1027	28.525	11.959	23.418	1.00	25.00
	ATOM	1458	C	ARG	1027	20.946	16.442	25.108	1.00	25.61
40	ATOM	1459	O	ARG	1027	20.075	15.599	24.834	1.00	26.41
	ATOM	1460	N	ASP	1028	20.712	17.370	25.995	1.00	22.28
	ATOM	1461	H	ASP	1028	21.422	17.928	26.357	1.00	25.00
	ATOM	1462	CA	ASP	1028	19.309	17.416	26.470	1.00	24.88
	ATOM	1463	CB	ASP	1028	19.088	16.831	27.822	1.00	21.12
45	ATOM	1464	CG	ASP	1028	17.590	16.694	28.223	1.00	25.13
	ATOM	1465	OD1	ASP	1028	17.424	16.372	29.386	1.00	27.20
	ATOM	1466	OD2	ASP	1028	16.585	16.825	27.478	1.00	21.85
	ATOM	1467	C	ASP	1028	18.774	18.862	26.557	1.00	26.41
	ATOM	1468	O	ASP	1028	18.101	19.262	27.525	1.00	29.04
50	ATOM	1469	N	LEU	1029	19.048	19.665	25.504	1.00	26.14
	ATOM	1470	H	LEU	1029	19.573	19.261	24.775	1.00	25.00
	ATOM	1471	CA	LEU	1029	18.664	21.071	25.412	1.00	25.63
	ATOM	1472	CB	LEU	1029	19.410	21.607	24.247	1.00	23.25
	ATOM	1473	CG	LEU	1029	19.097	23.084	24.001	1.00	23.98
55	ATOM	1474	CD1	LEU	1029	19.059	24.033	25.202	1.00	19.72
	ATOM	1475	CD2	LEU	1029	20.188	23.351	22.985	1.00	21.04
	ATOM	1476	C	LEU	1029	17.172	21.184	25.268	1.00	28.53
	ATOM	1477	O	LEU	1029	16.536	20.573	24.416	1.00	29.06
	ATOM	1478	N	ALA	1030	16.530	21.910	26.154	1.00	27.58
60	ATOM	1479	H	ALA	1030	17.045	22.255	26.919	1.00	25.00
	ATOM	1480	CA	ALA	1030	15.073	21.993	26.122	1.00	24.12
	ATOM	1481	CB	ALA	1030	14.473	20.711	26.755	1.00	22.40

	ATOM	1482	C	ALA	1030	14.800	23.142	27.003	1.00	24.69
	ATOM	1483	O	ALA	1030	15.715	23.648	27.634	1.00	25.53
	ATOM	1484	N	ALA	1031	13.580	23.576	27.130	1.00	24.68
	ATOM	1485	H	ALA	1031	12.911	23.163	26.571	1.00	25.00
5	ATOM	1486	CA	ALA	1031	13.214	24.700	27.999	1.00	23.50
	ATOM	1487	CB	ALA	1031	11.929	25.306	27.480	1.00	25.13
	ATOM	1488	C	ALA	1031	12.981	24.198	29.418	1.00	24.64
	ATOM	1489	O	ALA	1031	12.525	24.960	30.234	1.00	26.49
	ATOM	1490	N	ARG	1032	13.012	22.892	29.757	1.00	22.29
10	ATOM	1491	H	ARG	1032	13.031	22.264	29.013	1.00	25.00
	ATOM	1492	CA	ARG	1032	12.864	22.442	31.138	1.00	17.04
	ATOM	1493	CB	ARG	1032	12.510	20.954	31.245	1.00	13.25
	ATOM	1494	CG	ARG	1032	13.458	19.993	30.548	1.00	13.62
	ATOM	1495	CD	ARG	1032	13.422	18.468	30.582	1.00	12.87
15	ATOM	1496	NE	ARG	1032	12.559	18.295	29.444	1.00	15.68
	ATOM	1497	HE	ARG	1032	11.611	18.499	29.491	1.00	25.00
	ATOM	1498	CZ	ARG	1032	12.978	17.942	28.274	1.00	12.03
	ATOM	1499	NH1	ARG	1032	11.988	17.950	27.440	1.00	14.06
	ATOM	1500	HH11	ARG	1032	11.050	18.213	27.686	1.00	25.00
20	ATOM	1501	HH12	ARG	1032	12.184	17.673	26.499	1.00	25.00
	ATOM	1502	NH2	ARG	1032	14.219	17.563	27.923	1.00	9.68
	ATOM	1503	HH21	ARG	1032	15.015	17.538	28.546	1.00	25.00
	ATOM	1504	HH22	ARG	1032	14.350	17.297	26.968	1.00	25.00
	ATOM	1505	C	ARG	1032	14.287	22.704	31.577	1.00	19.80
25	ATOM	1506	O	ARG	1032	14.572	22.938	32.736	1.00	22.83
	ATOM	1507	N	ASN	1033	15.279	22.528	30.715	1.00	15.85
	ATOM	1508	H	ASN	1033	15.064	22.299	29.796	1.00	25.00
	ATOM	1509	CA	ASN	1033	16.625	22.897	31.136	1.00	15.74
	ATOM	1510	CB	ASN	1033	17.652	21.947	30.355	1.00	15.87
30	ATOM	1511	CG	ASN	1033	17.572	20.632	30.988	1.00	15.81
	ATOM	1512	OD1	ASN	1033	17.101	20.466	32.101	1.00	17.66
	ATOM	1513	ND2	ASN	1033	17.917	19.587	30.318	1.00	16.68
	ATOM	1514	HD21	ASN	1033	18.218	19.632	29.398	1.00	25.00
	ATOM	1515	HD22	ASN	1033	17.851	18.745	30.808	1.00	25.00
35	ATOM	1516	C	ASN	1033	17.042	24.488	30.950	1.00	16.79
	ATOM	1517	O	ASN	1033	18.217	24.928	30.812	1.00	13.15
	ATOM	1518	N	ILE	1034	16.077	25.424	30.913	1.00	16.41
	ATOM	1519	H	ILE	1034	15.124	25.204	31.092	1.00	25.00
	ATOM	1520	CA	ILE	1034	16.542	26.783	30.705	1.00	15.12
40	ATOM	1521	CB	ILE	1034	16.024	27.418	29.429	1.00	19.12
	ATOM	1522	CG2	ILE	1034	16.748	28.760	29.327	1.00	22.07
	ATOM	1523	CG1	ILE	1034	16.410	26.742	28.098	1.00	11.09
	ATOM	1524	CD1	ILE	1034	17.829	26.722	27.654	1.00	8.91
	ATOM	1525	C	ILE	1034	15.960	27.466	31.869	1.00	16.80
45	ATOM	1526	O	ILE	1034	14.817	27.221	32.206	1.00	11.75
	ATOM	1527	N	LEU	1035	16.880	28.073	32.691	1.00	20.93
	ATOM	1528	H	LEU	1035	17.825	27.915	32.554	1.00	25.00
	ATOM	1529	CA	LEU	1035	16.382	28.737	33.906	1.00	22.74
	ATOM	1530	CB	LEU	1035	17.293	28.330	35.238	1.00	21.73
50	ATOM	1531	CG	LEU	1035	17.609	26.806	35.514	1.00	23.45
	ATOM	1532	CD1	LEU	1035	18.895	26.746	36.360	1.00	24.02
	ATOM	1533	CD2	LEU	1035	16.428	26.064	36.092	1.00	19.48
	ATOM	1534	C	LEU	1035	16.320	30.292	33.687	1.00	21.01
	ATOM	1535	O	LEU	1035	17.125	30.917	33.007	1.00	21.00
55	ATOM	1536	N	LEU	1036	15.332	30.929	34.239	1.00	19.94
	ATOM	1537	H	LEU	1036	14.716	30.402	34.785	1.00	25.00
	ATOM	1538	CA	LEU	1036	15.143	32.353	34.169	1.00	19.83
	ATOM	1539	CB	LEU	1036	13.631	32.687	33.778	1.00	19.83
	ATOM	1540	CG	LEU	1036	13.383	34.214	33.415	1.00	20.62
60	ATOM	1541	CD1	LEU	1036	14.359	34.761	32.371	1.00	16.36
	ATOM	1542	CD2	LEU	1036	11.993	34.307	32.861	1.00	19.55
	ATOM	1543	C	LEU	1036	15.507	33.020	35.513	1.00	20.70



	ATOM	1544	O	LEU	1036	14.890	32.815	36.574	1.00	20.34
	ATOM	1545	N	SER	1037	16.673	33.731	35.468	1.00	23.76
	ATOM	1546	H	SER	1037	17.137	33.710	34.588	1.00	25.00
	ATOM	1547	CA	SER	1037	17.321	34.595	36.523	1.00	26.43
5	ATOM	1548	CB	SER	1037	18.754	34.670	36.202	1.00	23.76
	ATOM	1549	OG	SER	1037	19.260	35.461	37.264	1.00	31.21
	ATOM	1550	HG	SER	1037	20.222	35.444	37.408	1.00	25.00
	ATOM	1551	C	SER	1037	16.730	36.021	36.543	1.00	28.96
	ATOM	1552	O	SER	1037	15.690	36.320	35.950	1.00	29.18
10	ATOM	1553	N	GLU	1038	17.267	36.986	37.206	1.00	33.44
	ATOM	1554	H	GLU	1038	18.169	36.858	37.524	1.00	25.00
	ATOM	1555	CA	GLU	1038	16.656	38.358	37.227	1.00	37.79
	ATOM	1556	CB	GLU	1038	17.140	39.328	38.294	1.00	44.42
	ATOM	1557	CG	GLU	1038	16.325	39.145	39.602	1.00	55.87
15	ATOM	1558	CD	GLU	1038	17.280	38.380	40.483	1.00	63.29
	ATOM	1559	OE1	GLU	1038	17.241	37.143	40.403	1.00	70.83
	ATOM	1560	OE2	GLU	1038	18.086	38.996	41.206	1.00	68.35
	ATOM	1561	C	GLU	1038	16.871	39.181	36.037	1.00	34.13
	ATOM	1562	O	GLU	1038	17.763	38.845	35.267	1.00	33.56
20	ATOM	1563	N	LYS	1039	16.020	40.193	35.848	1.00	30.85
	ATOM	1564	H	LYS	1039	15.326	40.431	36.446	1.00	25.00
	ATOM	1565	CA	LYS	1039	16.222	41.071	34.731	1.00	29.12
	ATOM	1566	CB	LYS	1039	17.510	41.929	35.206	1.00	36.93
	ATOM	1567	CG	LYS	1039	17.268	43.070	36.296	1.00	45.01
25	ATOM	1568	CD	LYS	1039	16.546	44.423	35.700	1.00	50.88
	ATOM	1569	CE	LYS	1039	15.240	44.364	34.734	1.00	53.62
	ATOM	1570	NZ	LYS	1039	15.483	44.307	33.247	1.00	56.74
	ATOM	1571	HZ1	LYS	1039	16.214	43.601	33.053	1.00	25.00
	ATOM	1572	HZ2	LYS	1039	15.859	45.211	32.899	1.00	25.00
30	ATOM	1573	HZ3	LYS	1039	14.618	44.077	32.726	1.00	25.00
	ATOM	1574	C	LYS	1039	16.306	40.331	33.396	1.00	23.17
	ATOM	1575	O	LYS	1039	17.159	40.558	32.603	1.00	17.05
	ATOM	1576	N	ASN	1040	15.358	39.465	33.088	1.00	23.92
	ATOM	1577	H	ASN	1040	14.689	39.321	33.772	1.00	25.00
35	ATOM	1578	CA	ASN	1040	15.285	38.648	31.873	1.00	25.79
	ATOM	1579	CB	ASN	1040	14.854	39.455	30.701	1.00	30.40
	ATOM	1580	CG	ASN	1040	13.451	39.907	30.880	1.00	33.72
	ATOM	1581	OD1	ASN	1040	12.487	39.183	31.088	1.00	38.65
	ATOM	1582	ND2	ASN	1040	13.274	41.183	30.869	1.00	36.83
40	ATOM	1583	HD21	ASN	1040	14.042	41.769	30.760	1.00	25.00
	ATOM	1584	HD22	ASN	1040	12.375	41.535	30.981	1.00	25.00
	ATOM	1585	C	ASN	1040	16.487	37.907	31.446	1.00	25.85
	ATOM	1586	O	ASN	1040	16.738	37.773	30.266	1.00	28.01
	ATOM	1587	N	VAL	1041	17.360	37.405	32.295	1.00	29.22
45	ATOM	1588	H	VAL	1041	17.251	37.599	33.238	1.00	25.00
	ATOM	1589	CA	VAL	1041	18.537	36.587	31.804	1.00	28.01
	ATOM	1590	CB	VAL	1041	19.856	36.834	32.579	1.00	27.95
	ATOM	1591	CG1	VAL	1041	20.943	36.217	31.691	1.00	24.89
	ATOM	1592	CG2	VAL	1041	20.134	38.380	32.870	1.00	27.12
50	ATOM	1593	C	VAL	1041	18.080	35.120	32.077	1.00	27.95
	ATOM	1594	O	VAL	1041	17.368	34.774	33.046	1.00	26.90
	ATOM	1595	N	VAL	1042	18.184	34.378	31.003	1.00	25.16
	ATOM	1596	H	VAL	1042	18.583	34.821	30.241	1.00	25.00
	ATOM	1597	CA	VAL	1042	17.820	32.970	30.907	1.00	21.12
55	ATOM	1598	CB	VAL	1042	16.921	33.129	29.674	1.00	17.71
	ATOM	1599	CG1	VAL	1042	17.675	32.585	28.445	1.00	16.43
	ATOM	1600	CG2	VAL	1042	15.532	32.707	30.064	1.00	12.78
	ATOM	1601	C	VAL	1042	19.229	32.337	30.876	1.00	21.51
	ATOM	1602	O	VAL	1042	20.217	32.817	30.303	1.00	20.59
60	ATOM	1603	N	LYS	1043	19.423	31.301	31.705	1.00	23.20
	ATOM	1604	H	LYS	1043	18.686	31.131	32.306	1.00	25.00
	ATOM	1605	CA	LYS	1043	20.673	30.427	31.929	1.00	20.32

	ATOM	1606	CB	LYS	1043	20.948	30.490	33.499	1.00	19.77
	ATOM	1607	CG	LYS	1043	22.078	31.497	33.528	1.00	15.44
	ATOM	1608	CD	LYS	1043	21.344	32.576	34.187	1.00	17.89
	ATOM	1609	CE	LYS	1043	22.194	33.816	33.848	1.00	15.84
5	ATOM	1610	NZ	LYS	1043	23.563	33.942	34.330	1.00	16.95
	ATOM	1611	HZ1	LYS	1043	24.081	33.043	34.207	1.00	25.00
	ATOM	1612	HZ2	LYS	1043	23.557	34.180	35.344	1.00	25.00
	ATOM	1613	HZ3	LYS	1043	24.074	34.685	33.790	1.00	25.00
	ATOM	1614	C	LYS	1043	20.532	28.944	31.417	1.00	18.97
10	ATOM	1615	O	LYS	1043	19.559	28.233	31.702	1.00	16.79
	ATOM	1616	N	ILE	1044	21.305	28.516	30.503	1.00	14.75
	ATOM	1617	H	ILE	1044	21.954	29.093	30.078	1.00	25.00
	ATOM	1618	CA	ILE	1044	21.199	27.157	30.150	1.00	16.47
	ATOM	1619	CB	ILE	1044	22.088	26.830	28.968	1.00	17.35
15	ATOM	1620	CG2	ILE	1044	22.221	25.250	28.847	1.00	13.49
	ATOM	1621	CG1	ILE	1044	21.541	27.507	27.715	1.00	17.70
	ATOM	1622	CD1	ILE	1044	22.667	27.664	26.673	1.00	9.28
	ATOM	1623	C	ILE	1044	21.665	26.259	31.265	1.00	17.50
	ATOM	1624	O	ILE	1044	22.852	26.326	31.590	1.00	15.15
20	ATOM	1625	N	CYS	1045	20.875	25.446	31.954	1.00	20.73
	ATOM	1626	H	CYS	1045	19.898	25.558	31.907	1.00	25.00
	ATOM	1627	CA	CYS	1045	21.549	24.487	32.946	1.00	21.86
	ATOM	1628	CB	CYS	1045	20.969	24.655	34.269	1.00	15.99
	ATOM	1629	SG	CYS	1045	19.374	24.021	34.191	1.00	21.11
25	ATOM	1630	C	CYS	1045	21.479	22.970	32.533	1.00	23.82
	ATOM	1631	O	CYS	1045	21.554	22.682	31.335	1.00	28.59
	ATOM	1632	N	ASP	1046	21.634	21.961	33.372	1.00	23.21
	ATOM	1633	H	ASP	1046	21.790	22.193	34.307	1.00	25.00
	ATOM	1634	CA	ASP	1046	21.504	20.556	33.023	1.00	18.69
30	ATOM	1635	CB	ASP	1046	22.718	19.839	32.531	1.00	20.96
	ATOM	1636	CG	ASP	1046	22.237	18.581	31.674	1.00	29.52
	ATOM	1637	OD1	ASP	1046	22.831	18.392	30.626	1.00	34.52
	ATOM	1638	OD2	ASP	1046	21.280	17.800	31.891	1.00	31.53
	ATOM	1639	C	ASP	1046	21.134	19.962	34.287	1.00	17.34
35	ATOM	1640	O	ASP	1046	21.990	19.984	35.137	1.00	17.07
	ATOM	1641	N	PHE	1047	19.862	19.675	34.586	1.00	17.24
	ATOM	1642	H	PHE	1047	19.129	19.933	33.986	1.00	25.00
	ATOM	1643	CA	PHE	1047	19.574	19.020	35.891	1.00	20.86
	ATOM	1644	CB	PHE	1047	18.117	18.716	36.126	1.00	17.07
40	ATOM	1645	CG	PHE	1047	17.362	19.934	36.358	1.00	18.68
	ATOM	1646	CD1	PHE	1047	17.199	20.865	35.355	1.00	20.17
	ATOM	1647	CD2	PHE	1047	16.737	20.127	37.548	1.00	16.12
	ATOM	1648	CE1	PHE	1047	16.345	21.964	35.581	1.00	21.18
	ATOM	1649	CE2	PHE	1047	15.887	21.200	37.784	1.00	20.05
45	ATOM	1650	CZ	PHE	1047	15.673	22.128	36.776	1.00	16.46
	ATOM	1651	C	PHE	1047	20.280	17.670	36.229	1.00	24.49
	ATOM	1652	O	PHE	1047	20.429	17.309	37.416	1.00	26.72
	ATOM	1653	N	GLY	1048	20.811	16.926	35.241	1.00	27.85
	ATOM	1654	H	GLY	1048	20.795	17.304	34.344	1.00	25.00
50	ATOM	1655	CA	GLY	1048	21.461	15.634	35.518	1.00	29.94
	ATOM	1656	C	GLY	1048	20.513	14.773	36.365	1.00	32.44
	ATOM	1657	O	GLY	1048	19.305	14.639	36.047	1.00	35.02
	ATOM	1658	N	LEU	1049	21.008	14.241	37.494	1.00	30.16
	ATOM	1659	H	LEU	1049	21.886	14.542	37.783	1.00	25.00
55	ATOM	1660	CA	LEU	1049	20.277	13.392	38.463	1.00	29.25
	ATOM	1661	CB	LEU	1049	21.403	12.758	39.377	1.00	32.57
	ATOM	1662	CG	LEU	1049	22.608	12.321	38.467	1.00	36.55
	ATOM	1663	CD1	LEU	1049	23.899	13.228	38.710	1.00	40.05
	ATOM	1664	CD2	LEU	1049	22.814	10.823	38.652	1.00	38.04
60	ATOM	1665	C	LEU	1049	19.248	14.226	39.232	1.00	29.13
	ATOM	1666	O	LEU	1049	18.481	13.662	40.010	1.00	29.68
	ATOM	1667	N	ALA	1050	19.267	15.581	39.111	1.00	28.60

	ATOM	1668	H	ALA	1050	20.000	15.981	38.643	1.00	25.00
	ATOM	1669	CA	ALA	1050	18.335	16.432	39.907	1.00	27.22
	ATOM	1670	CB	ALA	1050	18.690	17.902	39.853	1.00	23.24
	ATOM	1671	C	ALA	1050	16.981	16.267	39.432	1.00	27.12
5	ATOM	1672	O	ALA	1050	16.073	16.803	40.054	1.00	26.89
	ATOM	1673	N	ARG	1051	16.875	15.544	38.326	1.00	27.86
	ATOM	1674	H	ARG	1051	17.711	15.284	37.862	1.00	25.00
	ATOM	1675	CA	ARG	1051	15.609	15.218	37.717	1.00	30.49
10	ATOM	1676	CB	ARG	1051	15.531	15.818	36.400	1.00	28.81
	ATOM	1677	CG	ARG	1051	14.180	15.643	35.667	1.00	30.25
	ATOM	1678	CD	ARG	1051	14.106	16.034	34.200	1.00	31.56
	ATOM	1679	NE	ARG	1051	14.251	17.492	34.145	1.00	33.65
	ATOM	1680	HE	ARG	1051	13.642	18.102	34.609	1.00	25.00
	ATOM	1681	CZ	ARG	1051	15.221	18.122	33.520	1.00	35.98
15	ATOM	1682	NH1	ARG	1051	15.181	19.442	33.563	1.00	37.03
	ATOM	1683	HH11	ARG	1051	14.444	19.896	34.053	1.00	25.00
	ATOM	1684	HH12	ARG	1051	15.859	19.998	33.107	1.00	25.00
	ATOM	1685	NH2	ARG	1051	16.158	17.497	32.834	1.00	37.76
20	ATOM	1686	HH21	ARG	1051	16.176	16.505	32.764	1.00	25.00
	ATOM	1687	HH22	ARG	1051	16.838	18.036	32.368	1.00	25.00
	ATOM	1688	C	ARG	1051	15.401	13.690	37.556	1.00	32.17
	ATOM	1689	O	ARG	1051	16.235	12.967	37.015	1.00	33.05
	ATOM	1690	N	ASP	1052	14.346	13.215	38.139	1.00	33.62
	ATOM	1691	H	ASP	1052	13.774	13.879	38.555	1.00	25.00
25	ATOM	1692	CA	ASP	1052	13.867	11.855	38.150	1.00	35.25
	ATOM	1693	CB	ASP	1052	12.651	11.929	39.172	1.00	37.90
	ATOM	1694	CG	ASP	1052	12.047	10.718	39.913	1.00	40.68
	ATOM	1695	OD1	ASP	1052	12.404	9.596	39.596	1.00	42.47
	ATOM	1696	OD2	ASP	1052	11.231	10.886	40.840	1.00	38.36
30	ATOM	1697	C	ASP	1052	13.505	11.575	36.689	1.00	36.60
	ATOM	1698	O	ASP	1052	12.330	11.710	36.313	1.00	35.79
	ATOM	1699	N	ILE	1053	14.408	11.143	35.803	1.00	38.07
	ATOM	1700	H	ILE	1053	15.343	11.086	36.066	1.00	25.00
	ATOM	1701	CA	ILE	1053	13.935	10.942	34.413	1.00	40.02
35	ATOM	1702	CB	ILE	1053	15.045	10.831	33.317	1.00	39.91
	ATOM	1703	CG2	ILE	1053	15.741	12.188	33.301	1.00	37.74
	ATOM	1704	CG1	ILE	1053	15.990	9.642	33.510	1.00	39.65
	ATOM	1705	CD1	ILE	1053	16.985	9.560	32.309	1.00	39.92
	ATOM	1706	C	ILE	1053	13.059	9.724	34.222	1.00	42.46
40	ATOM	1707	O	ILE	1053	12.700	9.411	33.070	1.00	41.74
	ATOM	1708	N	TYR	1054	12.810	8.993	35.348	1.00	42.87
	ATOM	1709	H	TYR	1054	13.210	9.205	36.201	1.00	25.00
	ATOM	1710	CA	TYR	1054	11.890	7.886	35.169	1.00	43.17
45	ATOM	1711	CB	TYR	1054	12.344	6.532	35.787	1.00	41.56
	ATOM	1712	CG	TYR	1054	13.619	6.142	35.147	1.00	38.81
	ATOM	1713	CD1	TYR	1054	14.778	6.650	35.693	1.00	40.46
	ATOM	1714	CE1	TYR	1054	16.027	6.427	35.120	1.00	38.20
	ATOM	1715	CD2	TYR	1054	13.754	5.385	33.985	1.00	38.65
	ATOM	1716	CE2	TYR	1054	15.013	5.137	33.365	1.00	34.93
50	ATOM	1717	CZ	TYR	1054	16.128	5.678	33.966	1.00	35.95
	ATOM	1718	OH	TYR	1054	17.371	5.536	33.428	1.00	36.73
	ATOM	1719	HH	TYR	1054	17.311	5.066	32.602	1.00	25.00
	ATOM	1720	C	TYR	1054	10.584	8.306	35.778	1.00	44.90
	ATOM	1721	O	TYR	1054	9.685	7.470	35.816	1.00	49.01
55	ATOM	1722	N	LYS	1055	10.393	9.506	36.363	1.00	44.39
	ATOM	1723	H	LYS	1055	11.140	10.114	36.535	1.00	25.00
	ATOM	1724	CA	LYS	1055	8.984	9.848	36.806	1.00	44.54
	ATOM	1725	CB	LYS	1055	8.811	10.100	38.370	1.00	45.81
	ATOM	1726	C	LYS	1055	8.502	11.125	36.064	1.00	43.48
60	ATOM	1727	O	LYS	1055	7.501	11.763	36.420	1.00	44.33
	ATOM	1728	N	ASP	1056	9.307	11.490	35.021	1.00	41.61
	ATOM	1729	H	ASP	1056	10.106	10.951	34.870	1.00	25.00

	ATOM	1730	CA	ASP	1056	9.106	12.638	34.113	1.00	38.18
	ATOM	1731	CB	ASP	1056	10.462	13.366	33.770	1.00	36.39
	ATOM	1732	CG	ASP	1056	10.299	14.737	33.091	1.00	36.17
	ATOM	1733	OD1	ASP	1056	11.232	15.296	32.625	1.00	37.70
5	ATOM	1734	OD2	ASP	1056	9.256	15.350	33.022	1.00	34.32
	ATOM	1735	C	ASP	1056	8.440	12.252	32.754	1.00	34.40
	ATOM	1736	O	ASP	1056	8.929	11.447	31.955	1.00	33.38
	ATOM	1737	N	PRO	1057	7.343	12.892	32.376	1.00	30.92
	ATOM	1738	CD	PRO	1057	6.254	13.320	33.254	1.00	27.69
10	ATOM	1739	CA	PRO	1057	6.849	12.746	31.044	1.00	27.53
	ATOM	1740	CB	PRO	1057	5.553	13.424	30.992	1.00	25.15
	ATOM	1741	CG	PRO	1057	5.476	14.142	32.284	1.00	26.50
	ATOM	1742	C	PRO	1057	7.659	13.217	29.913	1.00	27.75
	ATOM	1743	O	PRO	1057	7.126	13.155	28.821	1.00	29.79
15	ATOM	1744	N	ASP	1058	8.852	13.736	29.956	1.00	27.50
	ATOM	1745	H	ASP	1058	9.289	13.889	30.807	1.00	25.00
	ATOM	1746	CA	ASP	1058	9.470	14.164	28.677	1.00	27.66
	ATOM	1747	CB	ASP	1058	10.082	15.567	28.837	1.00	27.35
	ATOM	1748	CG	ASP	1058	9.187	16.736	29.242	1.00	29.01
20	ATOM	1749	OD1	ASP	1058	9.778	17.741	29.638	1.00	32.75
	ATOM	1750	OD2	ASP	1058	7.963	16.702	29.117	1.00	25.14
	ATOM	1751	C	ASP	1058	10.515	13.210	28.264	1.00	28.69
	ATOM	1752	O	ASP	1058	11.298	13.361	27.300	1.00	28.44
	ATOM	1753	N	TYR	1059	10.562	12.157	29.061	1.00	31.38
25	ATOM	1754	H	TYR	1059	10.008	12.072	29.866	1.00	25.00
	ATOM	1755	CA	TYR	1059	11.605	11.144	28.767	1.00	34.22
	ATOM	1756	CB	TYR	1059	12.582	11.041	29.932	1.00	29.34
	ATOM	1757	CG	TYR	1059	13.293	12.335	30.017	1.00	29.32
	ATOM	1758	CD1	TYR	1059	12.773	13.393	30.820	1.00	29.65
30	ATOM	1759	CE1	TYR	1059	13.502	14.572	31.011	1.00	19.89
	ATOM	1760	CD2	TYR	1059	14.531	12.478	29.398	1.00	25.72
	ATOM	1761	CE2	TYR	1059	15.234	13.655	29.614	1.00	22.55
	ATOM	1762	CZ	TYR	1059	14.704	14.665	30.419	1.00	20.03
	ATOM	1763	OH	TYR	1059	15.471	15.721	30.811	1.00	20.71
35	ATOM	1764	HH	TYR	1059	16.287	15.434	30.442	1.00	25.00
	ATOM	1765	C	TYR	1059	10.838	9.892	28.609	1.00	38.30
	ATOM	1766	O	TYR	1059	10.056	9.537	29.464	1.00	38.52
	ATOM	1767	N	VAL	1060	11.002	9.265	27.479	1.00	41.58
	ATOM	1768	H	VAL	1060	11.610	9.681	26.842	1.00	25.00
40	ATOM	1769	CA	VAL	1060	10.318	8.044	27.089	1.00	43.40
	ATOM	1770	CB	VAL	1060	9.623	8.577	25.832	1.00	42.99
	ATOM	1771	CG1	VAL	1060	9.822	7.775	24.546	1.00	44.89
	ATOM	1772	CG2	VAL	1060	8.230	8.710	26.252	1.00	41.88
	ATOM	1773	C	VAL	1060	11.276	6.810	26.950	1.00	47.40
45	ATOM	1774	O	VAL	1060	12.379	6.843	26.381	1.00	45.52
	ATOM	1775	N	ARG	1061	10.749	5.634	27.339	1.00	52.50
	ATOM	1776	H	ARG	1061	9.802	5.632	27.586	1.00	25.00
	ATOM	1777	CA	ARG	1061	11.486	4.356	27.363	1.00	57.10
	ATOM	1778	CB	ARG	1061	10.738	3.309	28.224	1.00	56.78
50	ATOM	1779	C	ARG	1061	11.895	3.617	26.132	1.00	60.89
	ATOM	1780	O	ARG	1061	11.110	2.824	25.626	1.00	63.82
	ATOM	1781	N	LYS	1062	12.956	4.010	25.463	1.00	63.22
	ATOM	1782	H	LYS	1062	13.444	4.775	25.802	1.00	25.00
	ATOM	1783	CA	LYS	1062	13.362	3.118	24.360	1.00	67.03
55	ATOM	1784	CB	LYS	1062	14.346	3.919	23.510	1.00	65.87
	ATOM	1785	C	LYS	1062	14.001	1.862	25.115	1.00	70.07
	ATOM	1786	O	LYS	1062	13.400	1.379	26.094	1.00	71.13
	ATOM	1787	N	GLY	1063	15.212	1.303	24.756	1.00	73.40
	ATOM	1788	H	GLY	1063	15.646	1.670	23.964	1.00	25.00
60	ATOM	1789	CA	GLY	1063	15.894	0.119	25.434	1.00	72.86
	ATOM	1790	C	GLY	1063	16.242	0.366	26.911	1.00	73.67
	ATOM	1791	O	GLY	1063	15.346	0.605	27.736	1.00	74.06

	ATOM	1792	N	ASP	1064	17.518	0.229	27.336	1.00	73.71
	ATOM	1793	H	ASP	1064	18.219	-0.126	26.769	1.00	25.00
	ATOM	1794	CA	ASP	1064	17.802	0.547	28.763	1.00	72.28
	ATOM	1795	CB	ASP	1064	18.899	-0.416	29.317	1.00	72.63
5	ATOM	1796	C	ASP	1064	18.255	2.013	28.772	1.00	70.24
	ATOM	1797	O	ASP	1064	19.364	2.365	29.217	1.00	70.53
	ATOM	1798	N	ALA	1065	17.344	2.836	28.147	1.00	66.71
	ATOM	1799	H	ALA	1065	16.510	2.422	27.839	1.00	25.00
	ATOM	1800	CA	ALA	1065	17.452	4.320	27.956	1.00	62.57
10	ATOM	1801	CB	ALA	1065	18.042	4.711	26.552	1.00	61.62
	ATOM	1802	C	ALA	1065	16.087	5.016	28.043	1.00	59.11
	ATOM	1803	O	ALA	1065	15.176	4.509	27.388	1.00	59.09
	ATOM	1804	N	ARG	1066	15.841	5.973	28.985	1.00	54.58
	ATOM	1805	H	ARG	1066	16.533	6.161	29.644	1.00	25.00
15	ATOM	1806	CA	ARG	1066	14.565	6.756	29.019	1.00	48.24
	ATOM	1807	CB	ARG	1066	13.994	7.088	30.446	1.00	45.40
	ATOM	1808	C	ARG	1066	15.023	8.085	28.365	1.00	45.68
	ATOM	1809	O	ARG	1066	15.715	8.908	28.958	1.00	45.21
	ATOM	1810	N	LEU	1067	14.851	8.192	27.051	1.00	42.30
20	ATOM	1811	H	LEU	1067	14.419	7.435	26.603	1.00	25.00
	ATOM	1812	CA	LEU	1067	15.198	9.345	26.231	1.00	37.69
	ATOM	1813	CB	LEU	1067	15.531	8.838	24.899	1.00	36.61
	ATOM	1814	CG	LEU	1067	16.690	7.827	24.982	1.00	34.60
	ATOM	1815	CD1	LEU	1067	17.019	7.123	23.699	1.00	33.02
25	ATOM	1816	CD2	LEU	1067	17.919	8.551	25.007	1.00	34.41
	ATOM	1817	C	LEU	1067	14.222	10.500	26.047	1.00	37.46
	ATOM	1818	O	LEU	1067	13.042	10.305	25.809	1.00	33.35
	ATOM	1819	N	PRO	1068	14.730	11.771	25.971	1.00	40.30
	ATOM	1820	CD	PRO	1068	16.149	12.168	26.330	1.00	39.73
30	ATOM	1821	CA	PRO	1068	13.885	13.014	25.586	1.00	38.91
	ATOM	1822	CB	PRO	1068	14.846	14.211	25.936	1.00	39.54
	ATOM	1823	CG	PRO	1068	16.273	13.592	25.775	1.00	39.14
	ATOM	1824	C	PRO	1068	13.408	12.992	24.114	1.00	36.97
	ATOM	1825	O	PRO	1068	13.701	13.817	23.228	1.00	32.57
35	ATOM	1826	N	LEU	1069	12.612	11.969	23.782	1.00	36.65
	ATOM	1827	H	LEU	1069	12.330	11.363	24.480	1.00	25.00
	ATOM	1828	CA	LEU	1069	12.221	11.789	22.344	1.00	34.21
	ATOM	1829	CB	LEU	1069	11.251	10.560	22.261	1.00	34.68
	ATOM	1830	CG	LEU	1069	11.920	9.187	21.857	1.00	35.25
40	ATOM	1831	CD1	LEU	1069	13.094	9.514	20.844	1.00	34.09
	ATOM	1832	CD2	LEU	1069	12.622	8.441	23.030	1.00	36.06
	ATOM	1833	C	LEU	1069	11.660	12.996	21.621	1.00	27.83
	ATOM	1834	O	LEU	1069	12.220	13.404	20.649	1.00	24.23
	ATOM	1835	N	LYS	1070	10.586	13.605	22.014	1.00	24.00
45	ATOM	1836	H	LYS	1070	10.036	13.333	22.730	1.00	25.00
	ATOM	1837	CA	LYS	1070	9.967	14.754	21.451	1.00	22.99
	ATOM	1838	CB	LYS	1070	9.049	15.201	22.506	1.00	20.18
	ATOM	1839	CG	LYS	1070	7.725	14.545	22.406	1.00	16.93
	ATOM	1840	CD	LYS	1070	6.602	15.201	23.201	1.00	19.52
50	ATOM	1841	CE	LYS	1070	6.712	15.321	24.701	1.00	22.27
	ATOM	1842	NZ	LYS	1070	5.318	15.611	25.105	1.00	23.89
	ATOM	1843	HZ1	LYS	1070	4.715	14.927	24.606	1.00	25.00
	ATOM	1844	HZ2	LYS	1070	5.086	16.585	24.825	1.00	25.00
	ATOM	1845	HZ3	LYS	1070	5.235	15.514	26.143	1.00	25.00
55	ATOM	1846	C	LYS	1070	11.001	15.784	21.078	1.00	27.06
	ATOM	1847	O	LYS	1070	10.942	16.561	20.101	1.00	29.34
	ATOM	1848	N	TRP	1071	12.081	15.771	21.805	1.00	28.16
	ATOM	1849	H	TRP	1071	12.226	15.082	22.472	1.00	25.00
	ATOM	1850	CA	TRP	1071	13.144	16.742	21.493	1.00	29.14
60	ATOM	1851	CB	TRP	1071	13.828	17.238	22.761	1.00	24.34
	ATOM	1852	CG	TRP	1071	12.988	18.047	23.581	1.00	21.47
	ATOM	1853	CD2	TRP	1071	11.839	17.658	24.311	1.00	20.60

	ATOM	1854	CE2	TRP	1071	11.261	18.844	24.807	1.00	18.15
	ATOM	1855	CE3	TRP	1071	11.235	16.432	24.586	1.00	21.35
	ATOM	1856	CD1	TRP	1071	13.097	19.440	23.663	1.00	21.95
	ATOM	1857	NE1	TRP	1071	12.047	19.888	24.396	1.00	21.56
5	ATOM	1858	HE1	TRP	1071	11.851	20.814	24.639	1.00	25.00
	ATOM	1859	CZ2	TRP	1071	10.100	18.794	25.565	1.00	15.70
	ATOM	1860	CZ3	TRP	1071	10.042	16.373	25.332	1.00	21.07
	ATOM	1861	CH2	TRP	1071	9.503	17.563	25.830	1.00	21.22
	ATOM	1862	C	TRP	1071	14.295	16.314	20.599	1.00	30.80
10	ATOM	1863	O	TRP	1071	15.079	17.247	20.253	1.00	31.15
	ATOM	1864	N	MET	1072	14.457	15.001	20.219	1.00	31.49
	ATOM	1865	H	MET	1072	13.767	14.348	20.421	1.00	25.00
	ATOM	1866	CA	MET	1072	15.723	14.596	19.467	1.00	32.07
	ATOM	1867	CB	MET	1072	16.272	13.142	20.012	1.00	34.06
15	ATOM	1868	CG	MET	1072	15.745	12.668	21.398	1.00	36.30
	ATOM	1869	SD	MET	1072	16.353	11.109	22.089	1.00	36.15
	ATOM	1870	CE	MET	1072	17.895	11.697	22.788	1.00	40.32
	ATOM	1871	C	MET	1072	15.759	14.596	17.968	1.00	31.33
	ATOM	1872	O	MET	1072	14.705	14.400	17.363	1.00	29.91
20	ATOM	1873	N	ALA	1073	16.939	14.772	17.362	1.00	30.05
	ATOM	1874	H	ALA	1073	17.765	14.776	17.893	1.00	25.00
	ATOM	1875	CA	ALA	1073	16.879	14.778	15.909	1.00	33.91
	ATOM	1876	CB	ALA	1073	18.155	15.325	15.376	1.00	32.06
	ATOM	1877	C	ALA	1073	16.675	13.357	15.318	1.00	39.04
25	ATOM	1878	O	ALA	1073	17.347	12.372	15.714	1.00	40.39
	ATOM	1879	N	PRO	1074	15.818	13.167	14.325	1.00	40.79
	ATOM	1880	CD	PRO	1074	14.403	13.372	14.228	1.00	41.14
	ATOM	1881	CA	PRO	1074	16.002	12.117	13.375	1.00	43.11
	ATOM	1882	CB	PRO	1074	15.642	12.879	12.142	1.00	41.14
30	ATOM	1883	CG	PRO	1074	14.268	12.831	12.804	1.00	42.64
	ATOM	1884	C	PRO	1074	17.293	11.334	13.387	1.00	45.76
	ATOM	1885	O	PRO	1074	17.140	10.195	13.761	1.00	47.78
	ATOM	1886	N	GLU	1075	18.548	11.750	13.155	1.00	46.56
	ATOM	1887	H	GLU	1075	18.675	12.692	13.021	1.00	25.00
35	ATOM	1888	CA	GLU	1075	19.636	10.744	13.200	1.00	45.95
	ATOM	1889	CB	GLU	1075	20.810	11.312	12.402	1.00	44.97
	ATOM	1890	CG	GLU	1075	21.733	12.301	13.044	1.00	44.30
	ATOM	1891	CD	GLU	1075	21.159	13.596	13.527	1.00	40.87
	ATOM	1892	OE1	GLU	1075	20.068	13.949	13.066	1.00	32.82
40	ATOM	1893	OE2	GLU	1075	21.882	14.238	14.325	1.00	41.53
	ATOM	1894	C	GLU	1075	20.061	10.240	14.598	1.00	48.08
	ATOM	1895	O	GLU	1075	20.640	9.160	14.770	1.00	49.35
	ATOM	1896	N	THR	1076	19.865	11.016	15.669	1.00	49.29
	ATOM	1897	H	THR	1076	19.524	11.922	15.554	1.00	25.00
45	ATOM	1898	CA	THR	1076	20.185	10.516	17.025	1.00	48.50
	ATOM	1899	CB	THR	1076	19.962	11.565	18.093	1.00	47.69
	ATOM	1900	OG1	THR	1076	20.569	12.790	17.681	1.00	45.05
	ATOM	1901	HG1	THR	1076	20.446	13.406	18.403	1.00	25.00
	ATOM	1902	CG2	THR	1076	20.477	11.019	19.433	1.00	45.23
50	ATOM	1903	C	THR	1076	19.157	9.411	17.252	1.00	47.90
	ATOM	1904	O	THR	1076	19.575	8.274	17.334	1.00	49.34
	ATOM	1905	N	ILE	1077	17.827	9.672	17.313	1.00	48.47
	ATOM	1906	H	ILE	1077	17.502	10.597	17.256	1.00	25.00
	ATOM	1907	CA	ILE	1077	16.792	8.590	17.487	1.00	49.42
55	ATOM	1908	CB	ILE	1077	15.425	9.178	16.842	1.00	44.15
	ATOM	1909	CG2	ILE	1077	14.319	8.109	16.703	1.00	44.75
	ATOM	1910	CG1	ILE	1077	14.756	10.190	17.788	1.00	37.92
	ATOM	1911	CD1	ILE	1077	13.272	10.626	17.422	1.00	27.84
	ATOM	1912	C	ILE	1077	17.243	7.175	16.861	1.00	53.36
60	ATOM	1913	O	ILE	1077	17.291	6.072	17.461	1.00	54.57
	ATOM	1914	N	PHE	1078	17.701	7.255	15.614	1.00	55.06
	ATOM	1915	H	PHE	1078	17.740	8.118	15.170	1.00	25.00

	ATOM	1916	CA	PHE	1078	18.167	6.084	14.914	1.00	56.25
	ATOM	1917	CB	PHE	1078	17.885	6.390	13.423	1.00	56.31
	ATOM	1918	CG	PHE	1078	16.371	6.525	13.301	1.00	58.21
	ATOM	1919	CD1	PHE	1078	15.751	7.753	13.589	1.00	57.13
5	ATOM	1920	CD2	PHE	1078	15.524	5.456	12.917	1.00	58.52
	ATOM	1921	CE1	PHE	1078	14.374	7.914	13.501	1.00	55.45
	ATOM	1922	CE2	PHE	1078	14.128	5.599	12.821	1.00	56.84
	ATOM	1923	CZ	PHE	1078	13.571	6.837	13.119	1.00	57.27
	ATOM	1924	C	PHE	1078	19.610	5.696	15.228	1.00	57.28
10	ATOM	1925	O	PHE	1078	19.902	4.786	16.028	1.00	58.40
	ATOM	1926	N	ASP	1079	20.584	6.376	14.678	1.00	57.15
	ATOM	1927	H	ASP	1079	20.483	7.203	14.172	1.00	25.00
	ATOM	1928	CA	ASP	1079	21.895	5.888	15.009	1.00	58.15
	ATOM	1929	CB	ASP	1079	22.609	5.621	13.634	1.00	59.05
15	ATOM	1930	CG	ASP	1079	22.069	6.328	12.354	1.00	61.20
	ATOM	1931	OD1	ASP	1079	20.858	6.288	12.027	1.00	58.47
	ATOM	1932	OD2	ASP	1079	22.932	6.900	11.669	1.00	62.91
	ATOM	1933	C	ASP	1079	22.666	6.733	16.013	1.00	59.81
	ATOM	1934	O	ASP	1079	23.784	7.236	15.792	1.00	61.48
20	ATOM	1935	N	ARG	1080	22.033	6.843	17.207	1.00	59.87
	ATOM	1936	H	ARG	1080	21.133	6.436	17.251	1.00	25.00
	ATOM	1937	CA	ARG	1080	22.560	7.566	18.422	1.00	59.31
	ATOM	1938	CB	ARG	1080	22.684	6.469	19.508	1.00	65.88
	ATOM	1939	CG	ARG	1080	21.458	5.516	19.732	1.00	72.03
25	ATOM	1940	CD	ARG	1080	22.045	4.310	20.564	1.00	79.90
	ATOM	1941	NE	ARG	1080	22.920	3.385	19.754	1.00	87.63
	ATOM	1942	HE	ARG	1080	22.968	3.578	18.793	1.00	25.00
	ATOM	1943	CZ	ARG	1080	23.672	2.343	20.253	1.00	90.99
	ATOM	1944	NH1	ARG	1080	24.402	1.565	19.417	1.00	92.40
30	ATOM	1945	HH11	ARG	1080	24.402	1.756	18.435	1.00	25.00
	ATOM	1946	HH12	ARG	1080	24.916	0.797	19.786	1.00	25.00
	ATOM	1947	NH2	ARG	1080	23.686	2.054	21.571	1.00	91.90
	ATOM	1948	HH21	ARG	1080	23.138	2.606	22.195	1.00	25.00
	ATOM	1949	HH22	ARG	1080	24.207	1.275	21.903	1.00	25.00
35	ATOM	1950	C	ARG	1080	23.866	8.459	18.385	1.00	55.82
	ATOM	1951	O	ARG	1080	24.807	8.324	19.178	1.00	54.55
	ATOM	1952	N	VAL	1081	23.865	9.360	17.393	1.00	52.40
	ATOM	1953	H	VAL	1081	23.074	9.231	16.833	1.00	25.00
	ATOM	1954	CA	VAL	1081	24.812	10.458	16.972	1.00	48.84
40	ATOM	1955	CB	VAL	1081	24.778	10.791	15.356	1.00	49.94
	ATOM	1956	CG1	VAL	1081	24.407	12.238	14.969	1.00	49.32
	ATOM	1957	CG2	VAL	1081	26.151	10.924	14.772	1.00	48.88
	ATOM	1958	C	VAL	1081	24.233	11.708	17.675	1.00	46.62
	ATOM	1959	O	VAL	1081	23.049	12.091	17.516	1.00	46.67
45	ATOM	1960	N	TYR	1082	25.063	12.319	18.473	1.00	42.76
	ATOM	1961	H	TYR	1082	25.938	11.901	18.573	1.00	25.00
	ATOM	1962	CA	TYR	1082	24.740	13.562	19.170	1.00	39.04
	ATOM	1963	CB	TYR	1082	24.932	13.403	20.674	1.00	38.16
	ATOM	1964	CG	TYR	1082	23.827	12.900	21.446	1.00	34.58
50	ATOM	1965	CD1	TYR	1082	24.056	11.769	22.211	1.00	38.58
	ATOM	1966	CE1	TYR	1082	22.986	11.240	22.964	1.00	37.53
	ATOM	1967	CD2	TYR	1082	22.615	13.512	21.416	1.00	33.99
	ATOM	1968	CE2	TYR	1082	21.543	12.997	22.158	1.00	36.25
	ATOM	1969	CZ	TYR	1082	21.714	11.845	22.934	1.00	39.08
55	ATOM	1970	OH	TYR	1082	20.620	11.198	23.518	1.00	41.35
	ATOM	1971	HH	TYR	1082	20.981	10.409	23.945	1.00	25.00
	ATOM	1972	C	TYR	1082	25.804	14.518	18.605	1.00	38.97
	ATOM	1973	O	TYR	1082	27.003	14.214	18.715	1.00	40.63
	ATOM	1974	N	THR	1083	25.415	15.547	17.865	1.00	35.41
60	ATOM	1975	H	THR	1083	24.467	15.654	17.662	1.00	25.00
	ATOM	1976	CA	THR	1083	26.367	16.508	17.300	1.00	35.10
	ATOM	1977	CB	THR	1083	26.416	16.542	15.819	1.00	32.77

	ATOM	1978	OG1	THR	1083	25.109	16.731	15.306	1.00	32.46
	ATOM	1979	HG1	THR	1083	25.105	16.789	14.345	1.00	25.00
	ATOM	1980	CG2	THR	1083	26.996	15.278	15.338	1.00	33.29
	ATOM	1981	C	THR	1083	25.927	17.902	17.642	1.00	38.20
5	ATOM	1982	O	THR	1083	24.767	17.983	18.081	1.00	38.44
	ATOM	1983	N	ILE	1084	26.693	19.054	17.528	1.00	38.84
	ATOM	1984	H	ILE	1084	27.652	19.050	17.358	1.00	25.00
	ATOM	1985	CA	ILE	1084	25.899	20.273	17.913	1.00	39.23
	ATOM	1986	CB	ILE	1084	26.593	21.712	17.946	1.00	42.16
10	ATOM	1987	CG2	ILE	1084	27.085	21.957	19.405	1.00	44.04
	ATOM	1988	CG1	ILE	1084	27.745	21.882	16.950	1.00	44.94
	ATOM	1989	CD1	ILE	1084	27.347	22.047	15.465	1.00	47.97
	ATOM	1990	C	ILE	1084	24.752	20.429	16.928	1.00	37.38
	ATOM	1991	O	ILE	1084	23.780	21.127	17.149	1.00	37.85
15	ATOM	1992	N	GLN	1085	24.741	19.787	15.783	1.00	36.36
	ATOM	1993	H	GLN	1085	25.511	19.263	15.506	1.00	25.00
	ATOM	1994	CA	GLN	1085	23.591	19.988	14.905	1.00	32.80
	ATOM	1995	CB	GLN	1085	23.952	19.645	13.512	1.00	38.87
	ATOM	1996	CG	GLN	1085	25.018	20.710	12.997	1.00	48.38
20	ATOM	1997	CD	GLN	1085	24.633	22.276	13.040	1.00	51.52
	ATOM	1998	OE1	GLN	1085	25.315	23.141	13.617	1.00	55.17
	ATOM	1999	NE2	GLN	1085	23.575	22.749	12.400	1.00	49.91
	ATOM	2000	HE21	GLN	1085	22.997	22.158	11.887	1.00	25.00
	ATOM	2001	HE22	GLN	1085	23.399	23.705	12.459	1.00	25.00
25	ATOM	2002	C	GLN	1085	22.460	19.252	15.371	1.00	29.29
	ATOM	2003	O	GLN	1085	21.365	19.542	14.958	1.00	29.41
	ATOM	2004	N	SER	1086	22.648	18.247	16.203	1.00	27.89
	ATOM	2005	H	SER	1086	23.528	17.831	16.357	1.00	25.00
	ATOM	2006	CA	SER	1086	21.420	17.595	16.735	1.00	27.39
30	ATOM	2007	CB	SER	1086	21.688	16.215	17.368	1.00	26.64
	ATOM	2008	OG	SER	1086	22.800	16.196	18.229	1.00	32.26
	ATOM	2009	HG	SER	1086	22.880	15.316	18.608	1.00	25.00
	ATOM	2010	C	SER	1086	20.906	18.552	17.796	1.00	28.52
	ATOM	2011	O	SER	1086	19.689	18.681	18.089	1.00	28.65
35	ATOM	2012	N	ASP	1087	21.891	19.284	18.414	1.00	28.74
	ATOM	2013	H	ASP	1087	22.823	19.181	18.119	1.00	25.00
	ATOM	2014	CA	ASP	1087	21.539	20.382	19.427	1.00	28.48
	ATOM	2015	CB	ASP	1087	22.810	20.997	20.094	1.00	28.41
	ATOM	2016	CG	ASP	1087	23.416	20.294	21.317	1.00	25.14
40	ATOM	2017	OD1	ASP	1087	24.561	20.580	21.642	1.00	21.22
	ATOM	2018	OD2	ASP	1087	22.713	19.538	21.992	1.00	23.35
	ATOM	2019	C	ASP	1087	20.726	21.545	18.743	1.00	26.87
	ATOM	2020	O	ASP	1087	19.712	22.040	19.291	1.00	26.46
	ATOM	2021	N	VAL	1088	21.063	21.872	17.455	1.00	26.89
45	ATOM	2022	H	VAL	1088	21.834	21.448	17.002	1.00	25.00
	ATOM	2023	CA	VAL	1088	20.275	22.889	16.739	1.00	24.93
	ATOM	2024	CB	VAL	1088	20.842	23.077	15.389	1.00	23.65
	ATOM	2025	CG1	VAL	1088	19.903	24.065	14.729	1.00	29.19
	ATOM	2026	CG2	VAL	1088	22.301	23.476	15.401	1.00	21.70
50	ATOM	2027	C	VAL	1088	18.863	22.326	16.670	1.00	26.76
	ATOM	2028	O	VAL	1088	17.944	22.953	17.146	1.00	28.15
	ATOM	2029	N	TRP	1089	18.607	21.051	16.252	1.00	29.94
	ATOM	2030	H	TRP	1089	19.349	20.557	15.855	1.00	25.00
	ATOM	2031	CA	TRP	1089	17.221	20.447	16.142	1.00	26.99
55	ATOM	2032	CB	TRP	1089	17.308	18.833	15.816	1.00	23.39
	ATOM	2033	CG	TRP	1089	15.971	18.154	15.749	1.00	20.14
	ATOM	2034	CD2	TRP	1089	15.248	17.719	14.606	1.00	19.39
	ATOM	2035	CE2	TRP	1089	13.948	17.436	14.988	1.00	21.49
	ATOM	2036	CE3	TRP	1089	15.570	17.556	13.259	1.00	22.51
60	ATOM	2037	CD1	TRP	1089	15.026	18.102	16.799	1.00	20.76
	ATOM	2038	NE1	TRP	1089	13.796	17.671	16.377	1.00	22.04
	ATOM	2039	HE1	TRP	1089	12.988	17.520	16.926	1.00	25.00



	ATOM	2040	CZ2	TRP	1089	13.043	17.012	13.997	1.00	19.47
	ATOM	2041	CZ3	TRP	1089	14.699	17.133	12.279	1.00	19.86
	ATOM	2042	CH2	TRP	1089	13.414	16.865	12.672	1.00	23.72
	ATOM	2043	C	TRP	1089	16.454	20.678	17.423	1.00	26.12
5	ATOM	2044	O	TRP	1089	15.295	21.133	17.448	1.00	28.13
	ATOM	2045	N	SER	1090	17.040	20.297	18.553	1.00	25.26
	ATOM	2046	H	SER	1090	17.937	19.919	18.539	1.00	25.00
	ATOM	2047	CA	SER	1090	16.239	20.524	19.757	1.00	23.03
	ATOM	2048	CB	SER	1090	16.712	19.652	20.987	1.00	20.72
10	ATOM	2049	OG	SER	1090	18.066	19.147	20.915	1.00	19.68
	ATOM	2050	HG	SER	1090	18.072	18.373	21.471	1.00	25.00
	ATOM	2051	C	SER	1090	16.199	22.034	20.090	1.00	22.43
	ATOM	2052	O	SER	1090	15.228	22.381	20.782	1.00	21.00
	ATOM	2053	N	PHE	1091	17.201	22.904	19.726	1.00	21.18
15	ATOM	2054	H	PHE	1091	17.980	22.546	19.235	1.00	25.00
	ATOM	2055	CA	PHE	1091	17.050	24.381	19.885	1.00	22.59
	ATOM	2056	CB	PHE	1091	18.195	25.104	19.230	1.00	28.95
	ATOM	2057	CG	PHE	1091	18.027	26.570	19.483	1.00	36.08
	ATOM	2058	CD1	PHE	1091	18.027	27.065	20.826	1.00	36.59
20	ATOM	2059	CD2	PHE	1091	17.797	27.474	18.397	1.00	36.98
	ATOM	2060	CE1	PHE	1091	17.792	28.427	21.082	1.00	34.62
	ATOM	2061	CE2	PHE	1091	17.564	28.838	18.654	1.00	36.85
	ATOM	2062	CZ	PHE	1091	17.557	29.279	20.000	1.00	36.80
	ATOM	2063	C	PHE	1091	15.773	24.706	19.112	1.00	20.11
25	ATOM	2064	O	PHE	1091	14.804	25.357	19.549	1.00	20.48
	ATOM	2065	N	GLY	1092	15.569	24.187	17.936	1.00	20.58
	ATOM	2066	H	GLY	1092	16.257	23.584	17.562	1.00	25.00
	ATOM	2067	CA	GLY	1092	14.244	24.379	17.158	1.00	20.51
	ATOM	2068	C	GLY	1092	13.042	23.954	17.976	1.00	21.35
30	ATOM	2069	O	GLY	1092	12.025	24.637	18.077	1.00	25.27
	ATOM	2070	N	VAL	1093	13.115	22.852	18.740	1.00	22.05
	ATOM	2071	H	VAL	1093	13.958	22.330	18.789	1.00	25.00
	ATOM	2072	CA	VAL	1093	11.925	22.484	19.543	1.00	21.47
	ATOM	2073	CB	VAL	1093	12.168	21.022	20.058	1.00	19.28
35	ATOM	2074	CG1	VAL	1093	10.977	20.627	20.845	1.00	17.99
	ATOM	2075	CG2	VAL	1093	12.433	20.009	18.948	1.00	17.10
	ATOM	2076	C	VAL	1093	11.761	23.541	20.694	1.00	23.39
	ATOM	2077	O	VAL	1093	10.667	23.822	21.227	1.00	26.02
	ATOM	2078	N	LEU	1094	12.876	24.030	21.303	1.00	24.64
40	ATOM	2079	H	LEU	1094	13.734	23.682	20.979	1.00	25.00
	ATOM	2080	CA	LEU	1094	12.930	25.109	22.384	1.00	21.12
	ATOM	2081	CB	LEU	1094	14.350	25.628	22.624	1.00	21.26
	ATOM	2082	CG	LEU	1094	14.855	25.817	24.033	1.00	19.99
	ATOM	2083	CD1	LEU	1094	15.842	26.870	23.939	1.00	16.60
45	ATOM	2084	CD2	LEU	1094	13.846	26.320	24.994	1.00	19.25
	ATOM	2085	C	LEU	1094	12.189	26.302	21.875	1.00	20.18
	ATOM	2086	O	LEU	1094	11.355	26.783	22.635	1.00	20.92
	ATOM	2087	N	LEU	1095	12.546	26.782	20.608	1.00	20.96
	ATOM	2088	H	LEU	1095	13.286	26.321	20.157	1.00	25.00
50	ATOM	2089	CA	LEU	1095	11.877	27.954	19.932	1.00	19.31
	ATOM	2090	CB	LEU	1095	12.352	28.101	18.469	1.00	19.46
	ATOM	2091	CG	LEU	1095	13.869	28.484	18.319	1.00	23.37
	ATOM	2092	CD1	LEU	1095	14.318	28.888	16.867	1.00	22.59
	ATOM	2093	CD2	LEU	1095	14.110	29.641	19.243	1.00	22.26
55	ATOM	2094	C	LEU	1095	10.439	27.615	20.046	1.00	19.27
	ATOM	2095	O	LEU	1095	9.735	28.332	20.730	1.00	18.43
	ATOM	2096	N	TRP	1096	9.954	26.434	19.669	1.00	24.15
	ATOM	2097	H	TRP	1096	10.592	25.786	19.311	1.00	25.00
	ATOM	2098	CA	TRP	1096	8.478	25.995	19.800	1.00	22.47
60	ATOM	2099	CB	TRP	1096	8.190	24.546	19.128	1.00	22.13
	ATOM	2100	CG	TRP	1096	6.767	24.130	18.872	1.00	16.90
	ATOM	2101	CD2	TRP	1096	5.795	23.644	19.815	1.00	17.98

	ATOM	2102	CE2	TRP	1096	4.595	23.495	19.094	1.00	14.01
	ATOM	2103	CE3	TRP	1096	5.815	23.316	21.203	1.00	16.81
	ATOM	2104	CD1	TRP	1096	6.102	24.234	17.657	1.00	13.34
	ATOM	2105	NE1	TRP	1096	4.802	23.836	17.845	1.00	17.85
5	ATOM	2106	HE1	TRP	1096	4.149	23.735	17.116	1.00	25.00
	ATOM	2107	CZ2	TRP	1096	3.502	23.071	19.741	1.00	14.46
	ATOM	2108	CZ3	TRP	1096	4.647	22.865	21.841	1.00	12.70
	ATOM	2109	CH2	TRP	1096	3.492	22.756	21.113	1.00	14.17
	ATOM	2110	C	TRP	1096	8.007	25.948	21.218	1.00	24.62
10	ATOM	2111	O	TRP	1096	6.845	26.294	21.409	1.00	27.52
	ATOM	2112	N	GLU	1097	8.697	25.425	22.234	1.00	25.75
	ATOM	2113	H	GLU	1097	9.498	24.921	22.052	1.00	25.00
	ATOM	2114	CA	GLU	1097	8.098	25.540	23.632	1.00	25.34
	ATOM	2115	CB	GLU	1097	8.847	24.897	24.751	1.00	22.63
15	ATOM	2116	CG	GLU	1097	9.257	23.549	24.137	1.00	20.77
	ATOM	2117	CD	GLU	1097	10.209	22.892	25.143	1.00	15.97
	ATOM	2118	OE1	GLU	1097	9.737	22.634	26.180	1.00	13.60
	ATOM	2119	OE2	GLU	1097	11.439	22.780	24.852	1.00	14.82
	ATOM	2120	C	GLU	1097	8.156	27.022	24.070	1.00	25.88
20	ATOM	2121	O	GLU	1097	7.359	27.357	24.958	1.00	26.93
	ATOM	2122	N	ILE	1098	9.108	27.885	23.529	1.00	21.48
	ATOM	2123	H	ILE	1098	9.801	27.479	22.996	1.00	25.00
	ATOM	2124	CA	ILE	1098	9.135	29.264	23.877	1.00	18.13
	ATOM	2125	CB	ILE	1098	10.458	29.856	23.351	1.00	17.86
25	ATOM	2126	CG2	ILE	1098	10.348	31.364	23.570	1.00	17.72
	ATOM	2127	CG1	ILE	1098	11.726	29.488	24.257	1.00	16.28
	ATOM	2128	CD1	ILE	1098	12.903	30.374	23.817	1.00	12.05
	ATOM	2129	C	ILE	1098	7.896	29.882	23.284	1.00	20.51
	ATOM	2130	O	ILE	1098	6.866	30.200	23.937	1.00	20.69
30	ATOM	2131	N	PHE	1099	7.771	29.892	21.971	1.00	19.96
	ATOM	2132	H	PHE	1099	8.450	29.434	21.448	1.00	25.00
	ATOM	2133	CA	PHE	1099	6.533	30.505	21.349	1.00	21.69
	ATOM	2134	CB	PHE	1099	6.911	30.788	19.896	1.00	23.88
	ATOM	2135	CG	PHE	1099	8.028	31.751	19.887	1.00	25.83
35	ATOM	2136	CD1	PHE	1099	9.322	31.328	19.659	1.00	25.49
	ATOM	2137	CD2	PHE	1099	7.749	33.130	20.049	1.00	29.46
	ATOM	2138	CE1	PHE	1099	10.368	32.272	19.589	1.00	29.46
	ATOM	2139	CE2	PHE	1099	8.776	34.090	19.973	1.00	28.26
	ATOM	2140	CZ	PHE	1099	10.079	33.637	19.738	1.00	30.92
40	ATOM	2141	C	PHE	1099	5.104	29.835	21.438	1.00	23.83
	ATOM	2142	O	PHE	1099	4.099	30.203	20.791	1.00	25.21
	ATOM	2143	N	SER	1100	4.932	28.836	22.278	1.00	21.97
	ATOM	2144	H	SER	1100	5.736	28.546	22.733	1.00	25.00
	ATOM	2145	CA	SER	1100	3.669	28.146	22.611	1.00	21.78
45	ATOM	2146	CB	SER	1100	3.799	26.617	22.651	1.00	22.03
	ATOM	2147	OG	SER	1100	4.910	25.998	23.400	1.00	28.71
	ATOM	2148	HG	SER	1100	4.951	25.027	23.339	1.00	25.00
	ATOM	2149	C	SER	1100	3.389	28.573	24.024	1.00	21.63
	ATOM	2150	O	SER	1100	2.392	28.305	24.662	1.00	25.56
50	ATOM	2151	N	LEU	1101	4.381	29.158	24.672	1.00	20.91
	ATOM	2152	H	LEU	1101	5.213	29.266	24.198	1.00	25.00
	ATOM	2153	CA	LEU	1101	4.378	29.568	26.064	1.00	17.74
	ATOM	2154	CB	LEU	1101	3.226	30.645	26.354	1.00	17.05
	ATOM	2155	CG	LEU	1101	3.407	32.207	26.077	1.00	13.62
55	ATOM	2156	CD1	LEU	1101	2.196	32.961	26.589	1.00	11.85
	ATOM	2157	CD2	LEU	1101	4.467	32.819	26.970	1.00	14.55
	ATOM	2158	C	LEU	1101	4.296	28.324	26.983	1.00	16.90
	ATOM	2159	O	LEU	1101	3.418	27.999	27.746	1.00	14.35
	ATOM	2160	N	GLY	1102	5.303	27.514	26.807	1.00	17.34
60	ATOM	2161	H	GLY	1102	5.988	27.791	26.205	1.00	25.00
	ATOM	2162	CA	GLY	1102	5.439	26.330	27.603	1.00	21.58
	ATOM	2163	C	GLY	1102	4.478	25.222	27.346	1.00	23.22

	ATOM	2164	O	GLY	1102	3.844	24.709	28.237	1.00	20.48
	ATOM	2165	N	ALA	1103	4.329	24.779	26.127	1.00	26.61
	ATOM	2166	H	ALA	1103	4.799	25.241	25.421	1.00	25.00
5	ATOM	2167	CA	ALA	1103	3.428	23.655	25.891	1.00	28.03
	ATOM	2168	CB	ALA	1103	2.396	23.921	24.885	1.00	30.34
	ATOM	2169	C	ALA	1103	4.163	22.505	25.382	1.00	27.29
	ATOM	2170	O	ALA	1103	5.153	22.645	24.715	1.00	26.48
	ATOM	2171	N	SER	1104	3.630	21.316	25.581	1.00	30.20
	ATOM	2172	H	SER	1104	2.767	21.221	26.022	1.00	25.00
10	ATOM	2173	CA	SER	1104	4.431	20.159	25.160	1.00	28.46
	ATOM	2174	CB	SER	1104	3.849	18.907	25.769	1.00	28.90
	ATOM	2175	OG	SER	1104	4.860	18.448	26.700	1.00	35.21
	ATOM	2176	HG	SER	1104	4.455	17.668	27.103	1.00	25.00
	ATOM	2177	C	SER	1104	4.539	19.993	23.731	1.00	26.81
15	ATOM	2178	O	SER	1104	3.537	20.211	23.031	1.00	25.42
	ATOM	2179	N	PRO	1105	5.723	19.663	23.221	1.00	26.41
	ATOM	2180	CD	PRO	1105	7.019	19.946	23.805	1.00	26.89
	ATOM	2181	CA	PRO	1105	5.807	19.153	21.796	1.00	28.86
	ATOM	2182	CB	PRO	1105	7.316	18.708	21.670	1.00	28.48
20	ATOM	2183	CG	PRO	1105	8.021	19.744	22.599	1.00	25.77
	ATOM	2184	C	PRO	1105	4.765	18.078	21.309	1.00	29.00
	ATOM	2185	O	PRO	1105	3.939	17.526	22.045	1.00	27.42
	ATOM	2186	N	TYR	1106	4.742	17.910	19.976	1.00	32.39
	ATOM	2187	H	TYR	1106	5.403	18.431	19.461	1.00	25.00
25	ATOM	2188	CA	TYR	1106	3.884	16.976	19.212	1.00	32.09
	ATOM	2189	CB	TYR	1106	4.746	15.733	19.042	1.00	28.37
	ATOM	2190	CG	TYR	1106	5.967	16.150	18.342	1.00	22.33
	ATOM	2191	CD1	TYR	1106	7.252	16.190	18.885	1.00	18.74
	ATOM	2192	CE1	TYR	1106	8.345	16.610	18.056	1.00	19.73
30	ATOM	2193	CD2	TYR	1106	5.735	16.506	17.023	1.00	20.46
	ATOM	2194	CE2	TYR	1106	6.822	16.890	16.240	1.00	19.47
	ATOM	2195	CZ	TYR	1106	8.126	16.957	16.705	1.00	17.32
	ATOM	2196	OH	TYR	1106	9.103	17.438	15.816	1.00	20.96
	ATOM	2197	HH	TYR	1106	8.688	17.666	14.988	1.00	25.00
35	ATOM	2198	C	TYR	1106	2.605	16.792	19.916	1.00	37.70
	ATOM	2199	O	TYR	1106	2.273	15.790	20.517	1.00	38.11
	ATOM	2200	N	PRO	1107	1.783	17.783	19.848	1.00	42.80
	ATOM	2201	CD	PRO	1107	1.611	18.612	18.644	1.00	44.75
	ATOM	2202	CA	PRO	1107	0.598	17.844	20.767	1.00	46.86
40	ATOM	2203	CB	PRO	1107	0.116	19.270	20.559	1.00	45.44
	ATOM	2204	CG	PRO	1107	0.906	19.812	19.332	1.00	44.85
	ATOM	2205	C	PRO	1107	-0.369	16.708	20.274	1.00	50.98
	ATOM	2206	O	PRO	1107	-0.617	16.646	19.049	1.00	52.62
	ATOM	2207	N	GLY	1108	-1.047	15.854	21.115	1.00	54.30
45	ATOM	2208	H	GLY	1108	-1.024	16.010	22.086	1.00	25.00
	ATOM	2209	CA	GLY	1108	-1.848	14.673	20.564	1.00	56.17
	ATOM	2210	C	GLY	1108	-0.930	13.406	20.065	1.00	55.16
	ATOM	2211	O	GLY	1108	-1.254	12.251	20.353	1.00	57.87
	ATOM	2212	N	VAL	1109	0.213	13.569	19.372	1.00	51.01
50	ATOM	2213	H	VAL	1109	0.480	14.505	19.217	1.00	25.00
	ATOM	2214	CA	VAL	1109	1.089	12.470	18.906	1.00	46.70
	ATOM	2215	CB	VAL	1109	2.181	13.177	18.055	1.00	44.68
	ATOM	2216	CG1	VAL	1109	3.200	12.293	17.360	1.00	40.01
	ATOM	2217	CG2	VAL	1109	1.350	13.971	17.051	1.00	44.02
55	ATOM	2218	C	VAL	1109	1.685	11.560	20.029	1.00	46.69
	ATOM	2219	O	VAL	1109	2.390	11.991	20.940	1.00	46.19
	ATOM	2220	N	LYS	1110	1.288	10.259	20.028	1.00	47.10
	ATOM	2221	H	LYS	1110	0.568	10.029	19.394	1.00	25.00
	ATOM	2222	CA	LYS	1110	1.812	9.213	20.979	1.00	47.38
60	ATOM	2223	CB	LYS	1110	1.111	7.822	20.919	1.00	47.34
	ATOM	2224	C	LYS	1110	3.251	8.936	20.539	1.00	45.75
	ATOM	2225	O	LYS	1110	3.490	8.574	19.392	1.00	44.86

	ATOM	2226	N	ILE	1111	4.228	9.019	21.432	1.00	44.76
	ATOM	2227	H	ILE	1111	4.028	9.340	22.326	1.00	25.00
	ATOM	2228	CA	ILE	1111	5.590	8.881	20.958	1.00	45.21
	ATOM	2229	CB	ILE	1111	6.517	9.854	21.851	1.00	40.71
5	ATOM	2230	CG2	ILE	1111	7.931	9.971	21.353	1.00	36.51
	ATOM	2231	CG1	ILE	1111	5.951	11.270	21.767	1.00	39.93
	ATOM	2232	CD1	ILE	1111	6.119	11.730	20.297	1.00	37.57
	ATOM	2233	C	ILE	1111	5.971	7.445	20.951	1.00	47.50
	ATOM	2234	O	ILE	1111	6.297	6.783	21.942	1.00	48.98
10	ATOM	2235	N	ASP	1112	5.991	7.021	19.698	1.00	48.84
	ATOM	2236	H	ASP	1112	5.875	7.709	19.016	1.00	25.00
	ATOM	2237	CA	ASP	1112	6.316	5.643	19.341	1.00	48.91
	ATOM	2238	CB	ASP	1112	5.025	4.930	19.312	1.00	45.81
	ATOM	2239	CG	ASP	1112	4.151	5.510	18.248	1.00	43.96
15	ATOM	2240	OD1	ASP	1112	2.993	5.638	18.545	1.00	43.60
	ATOM	2241	OD2	ASP	1112	4.564	5.772	17.128	1.00	42.43
	ATOM	2242	C	ASP	1112	7.023	5.463	18.024	1.00	49.98
	ATOM	2243	O	ASP	1112	7.145	6.440	17.292	1.00	52.43
	ATOM	2244	N	GLU	1113	7.203	4.195	17.591	1.00	50.32
20	ATOM	2245	H	GLU	1113	6.832	3.534	18.197	1.00	25.00
	ATOM	2246	CA	GLU	1113	7.854	3.742	16.301	1.00	50.11
	ATOM	2247	CB	GLU	1113	7.488	2.281	16.041	1.00	51.85
	ATOM	2248	C	GLU	1113	7.409	4.558	15.079	1.00	48.46
	ATOM	2249	O	GLU	1113	8.165	4.958	14.211	1.00	45.03
25	ATOM	2250	N	GLU	1114	6.137	4.872	15.040	1.00	49.72
	ATOM	2251	H	GLU	1114	5.538	4.518	15.719	1.00	25.00
	ATOM	2252	CA	GLU	1114	5.564	5.656	13.945	1.00	53.60
	ATOM	2253	CB	GLU	1114	4.070	5.333	13.944	1.00	58.05
	ATOM	2254	CG	GLU	1114	3.999	3.759	13.746	1.00	62.96
30	ATOM	2255	CD	GLU	1114	4.532	3.320	12.385	1.00	64.21
	ATOM	2256	OE1	GLU	1114	5.726	3.081	12.206	1.00	63.41
	ATOM	2257	OE2	GLU	1114	3.721	3.215	11.473	1.00	65.13
	ATOM	2258	C	GLU	1114	5.879	7.127	14.037	1.00	54.15
	ATOM	2259	O	GLU	1114	6.219	7.747	13.026	1.00	54.04
35	ATOM	2260	N	PHE	1115	5.811	7.684	15.287	1.00	53.49
	ATOM	2261	H	PHE	1115	5.510	7.147	16.040	1.00	25.00
	ATOM	2262	CA	PHE	1115	6.170	9.084	15.568	1.00	49.34
	ATOM	2263	CB	PHE	1115	6.093	9.294	17.128	1.00	48.87
	ATOM	2264	CG	PHE	1115	6.926	10.453	17.470	1.00	50.12
40	ATOM	2265	CD1	PHE	1115	8.270	10.258	17.874	1.00	48.17
	ATOM	2266	CD2	PHE	1115	6.419	11.752	17.184	1.00	50.39
	ATOM	2267	CE1	PHE	1115	9.120	11.366	17.968	1.00	46.40
	ATOM	2268	CE2	PHE	1115	7.281	12.846	17.289	1.00	47.92
	ATOM	2269	CZ	PHE	1115	8.618	12.637	17.675	1.00	45.53
45	ATOM	2270	C	PHE	1115	7.559	9.228	14.968	1.00	48.44
	ATOM	2271	O	PHE	1115	7.691	10.060	14.073	1.00	47.06
	ATOM	2272	N	CYS	1116	8.533	8.343	15.324	1.00	46.82
	ATOM	2273	H	CYS	1116	8.265	7.578	15.881	1.00	25.00
	ATOM	2274	CA	CYS	1116	9.910	8.400	14.756	1.00	48.49
50	ATOM	2275	CB	CYS	1116	10.789	7.303	15.313	1.00	48.42
	ATOM	2276	SG	CYS	1116	10.678	7.110	17.073	1.00	54.37
	ATOM	2277	C	CYS	1116	10.056	8.264	13.214	1.00	49.91
	ATOM	2278	O	CYS	1116	10.852	8.896	12.499	1.00	48.30
	ATOM	2279	N	ARG	1117	9.346	7.318	12.636	1.00	52.31
55	ATOM	2280	H	ARG	1117	8.754	6.782	13.178	1.00	25.00
	ATOM	2281	CA	ARG	1117	9.440	7.132	11.176	1.00	53.98
	ATOM	2282	CB	ARG	1117	8.965	5.653	10.963	1.00	55.45
	ATOM	2283	CG	ARG	1117	8.515	5.202	9.520	1.00	55.43
	ATOM	2284	CD	ARG	1117	6.981	4.827	9.517	1.00	52.70
60	ATOM	2285	NE	ARG	1117	6.223	5.754	8.693	1.00	50.68
	ATOM	2286	HE	ARG	1117	6.694	6.265	8.013	1.00	25.00
	ATOM	2287	CZ	ARG	1117	4.926	5.932	8.910	1.00	53.22

	ATOM	2288	NH1	ARG	1117	4.208	6.767	8.163	1.00	55.02
	ATOM	2289	HH11	ARG	1117	4.654	7.285	7.429	1.00	25.00
	ATOM	2290	HH12	ARG	1117	3.232	6.893	8.351	1.00	25.00
	ATOM	2291	NH2	ARG	1117	4.289	5.274	9.873	1.00	55.66
5	ATOM	2292	HH21	ARG	1117	4.770	4.610	10.448	1.00	25.00
	ATOM	2293	HH22	ARG	1117	3.308	5.425	10.007	1.00	25.00
	ATOM	2294	C	ARG	1117	8.664	8.249	10.416	1.00	53.83
	ATOM	2295	O	ARG	1117	9.137	8.765	9.394	1.00	53.03
	ATOM	2296	N	ARG	1118	7.459	8.631	10.852	1.00	52.45
10	ATOM	2297	H	ARG	1118	6.996	8.150	11.543	1.00	25.00
	ATOM	2298	CA	ARG	1118	6.767	9.699	10.163	1.00	54.40
	ATOM	2299	CB	ARG	1118	5.423	9.740	10.893	1.00	53.94
	ATOM	2300	CG	ARG	1118	4.019	9.785	10.222	1.00	55.32
	ATOM	2301	CD	ARG	1118	2.844	9.729	11.280	1.00	58.84
15	ATOM	2302	NE	ARG	1118	3.322	10.646	12.342	1.00	62.73
	ATOM	2303	HE	ARG	1118	3.366	11.594	12.107	1.00	25.00
	ATOM	2304	CZ	ARG	1118	3.682	10.363	13.618	1.00	64.33
	ATOM	2305	NH1	ARG	1118	4.168	11.379	14.404	1.00	64.89
	ATOM	2306	HH11	ARG	1118	4.238	12.308	14.046	1.00	25.00
20	ATOM	2307	HH12	ARG	1118	4.447	11.172	15.343	1.00	25.00
	ATOM	2308	NH2	ARG	1118	3.494	9.128	14.134	1.00	64.62
	ATOM	2309	HH21	ARG	1118	3.092	8.393	13.586	1.00	25.00
	ATOM	2310	HH22	ARG	1118	3.780	8.928	15.070	1.00	25.00
	ATOM	2311	C	ARG	1118	7.786	10.879	10.336	1.00	56.01
25	ATOM	2312	O	ARG	1118	8.217	11.495	9.366	1.00	57.22
	ATOM	2313	N	LEU	1119	8.387	11.123	11.519	1.00	57.58
	ATOM	2314	H	LEU	1119	8.114	10.639	12.319	1.00	25.00
	ATOM	2315	CA	LEU	1119	9.390	12.229	11.599	1.00	58.82
	ATOM	2316	CB	LEU	1119	10.047	12.484	13.045	1.00	59.62
30	ATOM	2317	CG	LEU	1119	9.475	13.548	14.069	1.00	58.45
	ATOM	2318	CD1	LEU	1119	10.565	14.576	14.242	1.00	59.12
	ATOM	2319	CD2	LEU	1119	8.163	14.230	13.637	1.00	59.25
	ATOM	2320	C	LEU	1119	10.566	11.971	10.659	1.00	57.85
	ATOM	2321	O	LEU	1119	10.864	12.839	9.855	1.00	58.04
35	ATOM	2322	N	LYS	1120	11.257	10.840	10.708	1.00	57.73
	ATOM	2323	H	LYS	1120	10.948	10.171	11.329	1.00	25.00
	ATOM	2324	CA	LYS	1120	12.391	10.588	9.799	1.00	57.69
	ATOM	2325	CB	LYS	1120	12.834	9.108	9.957	1.00	57.51
	ATOM	2326	CG	LYS	1120	14.353	9.105	10.188	1.00	57.64
40	ATOM	2327	CD	LYS	1120	15.329	7.824	10.084	1.00	57.73
	ATOM	2328	CE	LYS	1120	16.887	8.231	10.297	1.00	52.79
	ATOM	2329	NZ	LYS	1120	17.795	7.131	10.048	1.00	49.63
	ATOM	2330	HZ1	LYS	1120	17.491	6.657	9.176	1.00	25.00
	ATOM	2331	HZ2	LYS	1120	17.718	6.453	10.831	1.00	25.00
45	ATOM	2332	HZ3	LYS	1120	18.749	7.517	9.975	1.00	25.00
	ATOM	2333	C	LYS	1120	12.030	10.888	8.289	1.00	58.03
	ATOM	2334	O	LYS	1120	12.889	11.283	7.464	1.00	59.30
	ATOM	2335	N	GLU	1121	10.725	10.662	7.910	1.00	56.98
	ATOM	2336	H	GLU	1121	10.095	10.342	8.600	1.00	25.00
50	ATOM	2337	CA	GLU	1121	10.234	10.888	6.541	1.00	53.98
	ATOM	2338	CB	GLU	1121	9.251	9.700	6.315	1.00	53.54
	ATOM	2339	CG	GLU	1121	7.767	10.037	6.359	1.00	56.71
	ATOM	2340	CD	GLU	1121	6.735	8.874	6.380	1.00	58.55
	ATOM	2341	OE1	GLU	1121	5.524	9.153	6.229	1.00	58.21
55	ATOM	2342	OE2	GLU	1121	7.112	7.706	6.589	1.00	59.37
	ATOM	2343	C	GLU	1121	9.678	12.311	6.340	1.00	52.78
	ATOM	2344	O	GLU	1121	8.972	12.639	5.390	1.00	53.41
	ATOM	2345	N	GLY	1122	10.041	13.269	7.182	1.00	50.57
	ATOM	2346	H	GLY	1122	10.582	13.037	7.961	1.00	25.00
60	ATOM	2347	CA	GLY	1122	9.574	14.643	7.016	1.00	47.68
	ATOM	2348	C	GLY	1122	8.455	15.216	7.894	1.00	47.58
	ATOM	2349	O	GLY	1122	8.120	16.361	7.663	1.00	47.91

	ATOM	2350	N	THR	1123	7.679	14.579	8.755	1.00	46.51
	ATOM	2351	H	THR	1123	7.716	13.608	8.795	1.00	25.00
	ATOM	2352	CA	THR	1123	6.655	15.342	9.574	1.00	46.74
	ATOM	2353	CB	THR	1123	5.801	14.371	10.368	1.00	48.37
5	ATOM	2354	OG1	THR	1123	5.993	13.028	9.819	1.00	49.06
	ATOM	2355	HG1	THR	1123	5.496	12.413	10.364	1.00	25.00
	ATOM	2356	CG2	THR	1123	4.287	14.815	10.266	1.00	48.12
	ATOM	2357	C	THR	1123	7.349	16.354	10.570	1.00	44.91
	ATOM	2358	O	THR	1123	8.478	16.139	11.037	1.00	42.37
10	ATOM	2359	N	ARG	1124	6.716	17.479	10.940	1.00	41.75
	ATOM	2360	H	ARG	1124	5.763	17.557	10.755	1.00	25.00
	ATOM	2361	CA	ARG	1124	7.355	18.585	11.765	1.00	39.45
	ATOM	2362	CB	ARG	1124	7.997	19.751	10.971	1.00	33.99
	ATOM	2363	CG	ARG	1124	9.368	19.573	10.240	1.00	27.79
15	ATOM	2364	CD	ARG	1124	10.252	18.632	10.886	1.00	26.97
	ATOM	2365	NE	ARG	1124	11.218	18.330	9.855	1.00	30.02
	ATOM	2366	HE	ARG	1124	11.712	19.052	9.422	1.00	25.00
	ATOM	2367	CZ	ARG	1124	11.532	17.039	9.626	1.00	33.89
	ATOM	2368	NH1	ARG	1124	10.969	16.046	10.333	1.00	34.33
20	ATOM	2369	HH11	ARG	1124	10.302	16.277	11.031	1.00	25.00
	ATOM	2370	HH12	ARG	1124	11.226	15.105	10.151	1.00	25.00
	ATOM	2371	NH2	ARG	1124	12.439	16.717	8.681	1.00	33.78
	ATOM	2372	HH21	ARG	1124	12.890	17.424	8.135	1.00	25.00
	ATOM	2373	HH22	ARG	1124	12.695	15.764	8.523	1.00	25.00
25	ATOM	2374	C	ARG	1124	6.328	19.286	12.599	1.00	39.04
	ATOM	2375	O	ARG	1124	5.181	19.286	12.161	1.00	41.44
	ATOM	2376	N	MET	1125	6.640	19.952	13.717	1.00	36.82
	ATOM	2377	H	MET	1125	7.564	20.216	13.943	1.00	25.00
	ATOM	2378	CA	MET	1125	5.416	20.427	14.393	1.00	32.81
30	ATOM	2379	CB	MET	1125	5.996	20.742	15.748	1.00	32.01
	ATOM	2380	CG	MET	1125	5.207	20.096	16.820	1.00	26.26
	ATOM	2381	SD	MET	1125	5.867	20.612	18.376	1.00	25.75
	ATOM	2382	CE	MET	1125	7.621	20.308	18.211	1.00	10.01
	ATOM	2383	C	MET	1125	4.508	21.534	13.727	1.00	34.63
35	ATOM	2384	O	MET	1125	4.753	22.165	12.687	1.00	31.81
	ATOM	2385	N	ARG	1126	3.344	21.719	14.348	1.00	35.77
	ATOM	2386	H	ARG	1126	3.123	21.159	15.125	1.00	25.00
	ATOM	2387	CA	ARG	1126	2.407	22.758	13.823	1.00	40.57
	ATOM	2388	CB	ARG	1126	0.964	22.625	14.388	1.00	46.37
40	ATOM	2389	CG	ARG	1126	1.007	22.494	15.995	1.00	54.46
	ATOM	2390	CD	ARG	1126	0.273	23.651	16.777	1.00	54.56
	ATOM	2391	NE	ARG	1126	0.846	24.015	18.119	1.00	56.78
	ATOM	2392	HE	ARG	1126	1.771	23.736	18.314	1.00	25.00
	ATOM	2393	CZ	ARG	1126	0.186	24.741	19.039	1.00	56.64
45	ATOM	2394	NH1	ARG	1126	0.726	25.073	20.244	1.00	54.98
	ATOM	2395	HH11	ARG	1126	1.653	24.774	20.464	1.00	25.00
	ATOM	2396	HH12	ARG	1126	0.175	25.566	20.915	1.00	25.00
	ATOM	2397	NH2	ARG	1126	-1.059	25.060	18.683	1.00	57.97
	ATOM	2398	HH21	ARG	1126	-1.392	24.772	17.789	1.00	25.00
50	ATOM	2399	HH22	ARG	1126	-1.659	25.560	19.300	1.00	25.00
	ATOM	2400	C	ARG	1126	2.973	24.094	14.258	1.00	39.81
	ATOM	2401	O	ARG	1126	4.009	24.098	14.942	1.00	39.78
	ATOM	2402	N	ALA	1127	2.357	25.228	13.876	1.00	37.48
	ATOM	2403	H	ALA	1127	1.494	25.203	13.407	1.00	25.00
55	ATOM	2404	CA	ALA	1127	2.980	26.502	14.295	1.00	34.48
	ATOM	2405	CB	ALA	1127	2.882	27.601	13.198	1.00	35.65
	ATOM	2406	C	ALA	1127	2.342	27.003	15.548	1.00	29.84
	ATOM	2407	O	ALA	1127	1.108	26.876	15.694	1.00	28.74
	ATOM	2408	N	PRO	1128	3.182	27.404	16.512	1.00	24.48
60	ATOM	2409	CD	PRO	1128	4.609	27.302	16.540	1.00	24.29
	ATOM	2410	CA	PRO	1128	2.546	27.519	17.794	1.00	25.82
	ATOM	2411	CB	PRO	1128	3.616	27.198	18.784	1.00	24.12

	ATOM	2412	CG	PRO	1128	4.836	27.627	18.027	1.00	23.44
	ATOM	2413	C	PRO	1128	1.802	28.839	18.026	1.00	27.63
	ATOM	2414	O	PRO	1128	2.011	29.850	17.388	1.00	26.07
5	ATOM	2415	N	ASP	1129	0.841	28.826	18.915	1.00	29.07
	ATOM	2416	H	ASP	1129	0.744	27.989	19.400	1.00	25.00
	ATOM	2417	CA	ASP	1129	0.018	29.943	19.222	1.00	31.21
	ATOM	2418	CB	ASP	1129	-0.490	29.702	20.586	1.00	31.94
	ATOM	2419	CG	ASP	1129	-1.565	28.689	20.656	1.00	32.62
10	ATOM	2420	OD1	ASP	1129	-2.032	28.365	21.769	1.00	33.21
	ATOM	2421	OD2	ASP	1129	-1.938	28.275	19.569	1.00	34.16
	ATOM	2422	C	ASP	1129	0.498	31.391	19.161	1.00	33.97
	ATOM	2423	O	ASP	1129	-0.372	32.196	18.746	1.00	36.72
	ATOM	2424	N	TYR	1130	1.772	31.717	19.700	1.00	31.76
	ATOM	2425	H	TYR	1130	2.328	30.970	20.038	1.00	25.00
15	ATOM	2426	CA	TYR	1130	2.345	33.115	19.776	1.00	24.26
	ATOM	2427	CB	TYR	1130	2.623	33.290	21.268	1.00	20.42
	ATOM	2428	CG	TYR	1130	1.553	32.749	22.122	1.00	16.76
	ATOM	2429	CD1	TYR	1130	1.697	31.521	22.667	1.00	17.35
	ATOM	2430	CE1	TYR	1130	0.687	30.995	23.525	1.00	18.22
20	ATOM	2431	CD2	TYR	1130	0.408	33.466	22.414	1.00	16.69
	ATOM	2432	CE2	TYR	1130	-0.625	32.952	23.269	1.00	18.49
	ATOM	2433	CZ	TYR	1130	-0.469	31.674	23.841	1.00	19.13
	ATOM	2434	OH	TYR	1130	-1.405	31.084	24.714	1.00	21.04
	ATOM	2435	HH	TYR	1130	-2.124	31.690	24.895	1.00	25.00
25	ATOM	2436	C	TYR	1130	3.538	33.400	18.894	1.00	20.99
	ATOM	2437	O	TYR	1130	4.234	34.390	19.060	1.00	22.77
	ATOM	2438	N	THR	1131	3.896	32.519	18.001	1.00	18.89
	ATOM	2439	H	THR	1131	3.419	31.668	17.971	1.00	25.00
	ATOM	2440	CA	THR	1131	5.026	32.830	17.116	1.00	21.33
30	ATOM	2441	CB	THR	1131	5.363	31.520	16.306	1.00	21.78
	ATOM	2442	OG1	THR	1131	6.443	31.565	15.340	1.00	20.81
	ATOM	2443	HG1	THR	1131	6.457	30.727	14.873	1.00	25.00
	ATOM	2444	CG2	THR	1131	4.169	31.255	15.507	1.00	17.15
	ATOM	2445	C	THR	1131	4.747	34.013	16.157	1.00	27.77
35	ATOM	2446	O	THR	1131	3.655	34.627	16.077	1.00	28.78
	ATOM	2447	N	THR	1132	5.822	34.382	15.420	1.00	30.96
	ATOM	2448	H	THR	1132	6.644	33.871	15.563	1.00	25.00
	ATOM	2449	CA	THR	1132	5.913	35.431	14.368	1.00	32.58
	ATOM	2450	CB	THR	1132	7.118	36.476	14.467	1.00	32.35
40	ATOM	2451	OG1	THR	1132	8.327	35.737	14.466	1.00	33.27
	ATOM	2452	HG1	THR	1132	9.052	36.342	14.664	1.00	25.00
	ATOM	2453	CG2	THR	1132	7.052	37.390	15.647	1.00	30.38
	ATOM	2454	C	THR	1132	6.240	34.614	13.084	1.00	36.70
	ATOM	2455	O	THR	1132	6.854	33.526	13.096	1.00	36.52
45	ATOM	2456	N	PRO	1133	5.776	35.067	11.930	1.00	37.80
	ATOM	2457	CD	PRO	1133	4.486	35.800	11.751	1.00	38.91
	ATOM	2458	CA	PRO	1133	6.132	34.309	10.736	1.00	36.78
	ATOM	2459	CB	PRO	1133	5.573	35.315	9.691	1.00	37.46
	ATOM	2460	CG	PRO	1133	4.156	35.434	10.307	1.00	37.99
50	ATOM	2461	C	PRO	1133	7.565	33.800	10.631	1.00	35.99
	ATOM	2462	O	PRO	1133	7.873	32.618	10.531	1.00	35.88
	ATOM	2463	N	GLU	1134	8.519	34.673	10.701	1.00	37.31
	ATOM	2464	H	GLU	1134	8.268	35.604	10.823	1.00	25.00
	ATOM	2465	CA	GLU	1134	9.910	34.260	10.608	1.00	36.30
55	ATOM	2466	CB	GLU	1134	10.753	35.601	10.381	1.00	38.28
	ATOM	2467	CG	GLU	1134	10.423	36.936	11.138	1.00	42.08
	ATOM	2468	CD	GLU	1134	9.129	37.649	10.650	1.00	44.27
	ATOM	2469	OE1	GLU	1134	8.128	37.802	11.384	1.00	45.26
	ATOM	2470	OE2	GLU	1134	9.105	38.040	9.481	1.00	51.15
60	ATOM	2471	C	GLU	1134	10.270	33.412	11.838	1.00	36.73
	ATOM	2472	O	GLU	1134	11.175	32.622	11.644	1.00	35.14
	ATOM	2473	N	MET	1135	9.663	33.522	13.085	1.00	37.14

	ATOM	2474	H	MET	1135	8.915	34.157	13.153	1.00	25.00
	ATOM	2475	CA	MET	1135	10.041	32.634	14.225	1.00	36.24
	ATOM	2476	CB	MET	1135	9.456	33.084	15.572	1.00	35.92
	ATOM	2477	CG	MET	1135	10.532	33.895	16.436	1.00	39.05
5	ATOM	2478	SD	MET	1135	12.400	33.487	16.546	1.00	42.26
	ATOM	2479	CE	MET	1135	12.171	31.734	16.711	1.00	41.30
	ATOM	2480	C	MET	1135	9.605	31.196	13.896	1.00	38.58
	ATOM	2481	O	MET	1135	10.459	30.296	13.999	1.00	40.87
	ATOM	2482	N	TYR	1136	8.365	30.837	13.460	1.00	38.46
10	ATOM	2483	H	TYR	1136	7.663	31.532	13.428	1.00	25.00
	ATOM	2484	CA	TYR	1136	8.123	29.399	12.980	1.00	36.26
	ATOM	2485	CB	TYR	1136	6.693	29.301	12.441	1.00	41.32
	ATOM	2486	CG	TYR	1136	6.375	27.929	12.062	1.00	45.56
	ATOM	2487	CD1	TYR	1136	6.319	26.943	13.063	1.00	46.60
15	ATOM	2488	CE1	TYR	1136	6.095	25.598	12.686	1.00	49.46
	ATOM	2489	CD2	TYR	1136	6.209	27.625	10.691	1.00	47.00
	ATOM	2490	CE2	TYR	1136	5.989	26.279	10.322	1.00	48.28
	ATOM	2491	CZ	TYR	1136	5.924	25.245	11.314	1.00	47.90
	ATOM	2492	OH	TYR	1136	5.549	23.952	10.960	1.00	44.91
20	ATOM	2493	HH	TYR	1136	5.342	23.945	10.026	1.00	25.00
	ATOM	2494	C	TYR	1136	9.094	28.899	11.845	1.00	35.03
	ATOM	2495	O	TYR	1136	9.546	27.754	11.776	1.00	33.28
	ATOM	2496	N	GLN	1137	9.426	29.633	10.815	1.00	34.97
	ATOM	2497	H	GLN	1137	9.132	30.561	10.766	1.00	25.00
25	ATOM	2498	CA	GLN	1137	10.359	29.082	9.797	1.00	34.42
	ATOM	2499	CB	GLN	1137	10.324	29.940	8.516	1.00	39.53
	ATOM	2500	CG	GLN	1137	11.277	29.408	7.328	1.00	40.32
	ATOM	2501	CD	GLN	1137	10.705	28.264	6.490	1.00	39.24
	ATOM	2502	OE1	GLN	1137	9.524	28.224	6.140	1.00	39.43
30	ATOM	2503	NE2	GLN	1137	11.590	27.364	6.099	1.00	38.49
	ATOM	2504	HE21	GLN	1137	12.532	27.447	6.328	1.00	25.00
	ATOM	2505	HE22	GLN	1137	11.274	26.615	5.565	1.00	25.00
	ATOM	2506	C	GLN	1137	11.764	28.971	10.309	1.00	34.66
	ATOM	2507	O	GLN	1137	12.688	28.425	9.637	1.00	34.71
35	ATOM	2508	N	THR	1138	12.054	29.610	11.502	1.00	34.40
	ATOM	2509	H	THR	1138	11.464	30.277	11.929	1.00	25.00
	ATOM	2510	CA	THR	1138	13.459	29.357	11.986	1.00	31.73
	ATOM	2511	CB	THR	1138	14.092	30.288	13.080	1.00	35.22
	ATOM	2512	OG1	THR	1138	14.053	31.734	12.891	1.00	36.89
40	ATOM	2513	HG1	THR	1138	14.472	32.218	13.601	1.00	25.00
	ATOM	2514	CG2	THR	1138	15.577	30.011	12.776	1.00	35.02
	ATOM	2515	C	THR	1138	13.355	27.983	12.561	1.00	27.81
	ATOM	2516	O	THR	1138	14.156	27.153	12.128	1.00	25.13
	ATOM	2517	N	MET	1139	12.261	27.681	13.295	1.00	23.68
45	ATOM	2518	H	MET	1139	11.590	28.369	13.439	1.00	25.00
	ATOM	2519	CA	MET	1139	12.063	26.334	13.845	1.00	26.59
	ATOM	2520	CB	MET	1139	10.700	26.122	14.515	1.00	25.38
	ATOM	2521	CG	MET	1139	10.436	27.149	15.563	1.00	22.42
	ATOM	2522	SD	MET	1139	8.753	27.056	16.115	1.00	26.30
50	ATOM	2523	CE	MET	1139	8.276	28.680	16.812	1.00	22.38
	ATOM	2524	C	MET	1139	12.133	25.354	12.688	1.00	28.91
	ATOM	2525	O	MET	1139	13.013	24.504	12.626	1.00	30.62
	ATOM	2526	N	LEU	1140	11.310	25.467	11.640	1.00	32.59
	ATOM	2527	H	LEU	1140	10.605	26.161	11.632	1.00	25.00
55	ATOM	2528	CA	LEU	1140	11.486	24.528	10.512	1.00	31.84
	ATOM	2529	CB	LEU	1140	10.697	24.925	9.319	1.00	31.87
	ATOM	2530	CG	LEU	1140	9.246	25.171	9.506	1.00	32.21
	ATOM	2531	CD1	LEU	1140	8.848	25.622	8.116	1.00	30.84
	ATOM	2532	CD2	LEU	1140	8.481	24.018	10.154	1.00	29.66
60	ATOM	2533	C	LEU	1140	12.928	24.488	10.011	1.00	32.79
	ATOM	2534	O	LEU	1140	13.492	23.455	9.688	1.00	36.00
	ATOM	2535	N	ASP	1141	13.641	25.568	9.905	1.00	34.15



	ATOM	2536	H	ASP	1141	13.287	26.450	10.179	1.00	25.00
	ATOM	2537	CA	ASP	1141	15.022	25.439	9.421	1.00	36.61
	ATOM	2538	CB	ASP	1141	15.520	26.896	9.376	1.00	45.00
	ATOM	2539	CG	ASP	1141	15.111	27.695	8.122	1.00	49.02
5	ATOM	2540	OD1	ASP	1141	15.696	28.750	7.947	1.00	51.91
	ATOM	2541	OD2	ASP	1141	14.252	27.310	7.314	1.00	55.03
	ATOM	2542	C	ASP	1141	15.899	24.520	10.277	1.00	35.98
	ATOM	2543	O	ASP	1141	16.905	23.885	9.944	1.00	33.37
	ATOM	2544	N	CYS	1142	15.548	24.621	11.544	1.00	36.95
10	ATOM	2545	H	CYS	1142	14.835	25.250	11.789	1.00	25.00
	ATOM	2546	CA	CYS	1142	16.255	23.863	12.610	1.00	35.40
	ATOM	2547	CB	CYS	1142	15.850	24.524	14.043	1.00	34.46
	ATOM	2548	SG	CYS	1142	17.060	25.798	14.569	1.00	32.93
	ATOM	2549	C	CYS	1142	15.987	22.395	12.501	1.00	33.96
15	ATOM	2550	O	CYS	1142	16.864	21.614	12.854	1.00	33.23
	ATOM	2551	N	TRP	1143	14.779	22.083	11.990	1.00	33.68
	ATOM	2552	H	TRP	1143	14.177	22.839	11.837	1.00	25.00
	ATOM	2553	CA	TRP	1143	14.263	20.738	11.766	1.00	33.12
	ATOM	2554	CB	TRP	1143	12.777	20.849	11.936	1.00	25.16
20	ATOM	2555	CG	TRP	1143	12.426	21.295	13.283	1.00	18.67
	ATOM	2556	CD2	TRP	1143	11.177	21.803	13.747	1.00	19.35
	ATOM	2557	CE2	TRP	1143	11.301	21.921	15.157	1.00	16.94
	ATOM	2558	CE3	TRP	1143	9.927	22.188	13.110	1.00	20.55
	ATOM	2559	CD1	TRP	1143	13.247	21.132	14.415	1.00	19.30
25	ATOM	2560	NE1	TRP	1143	12.569	21.505	15.550	1.00	19.06
	ATOM	2561	HE1	TRP	1143	12.912	21.451	16.464	1.00	25.00
	ATOM	2562	CZ2	TRP	1143	10.182	22.401	15.871	1.00	18.02
	ATOM	2563	CZ3	TRP	1143	8.818	22.663	13.857	1.00	18.22
	ATOM	2564	CH2	TRP	1143	8.957	22.778	15.234	1.00	17.34
30	ATOM	2565	C	TRP	1143	14.660	20.102	10.446	1.00	38.77
	ATOM	2566	O	TRP	1143	14.227	19.026	10.021	1.00	42.28
	ATOM	2567	N	HIS	1144	15.604	20.709	9.752	1.00	42.60
	ATOM	2568	H	HIS	1144	15.960	21.574	10.046	1.00	25.00
	ATOM	2569	CA	HIS	1144	16.035	20.099	8.499	1.00	43.58
35	ATOM	2570	C	HIS	1144	16.803	18.736	8.616	1.00	44.75
	ATOM	2571	O	HIS	1144	17.979	18.583	8.977	1.00	43.39
	ATOM	2572	CB	HIS	1144	16.817	21.246	7.785	1.00	44.46
	ATOM	2573	CG	HIS	1144	17.428	20.768	6.505	1.00	47.28
	ATOM	2574	ND1	HIS	1144	17.082	21.248	5.279	1.00	45.53
40	ATOM	2575	HD1	HIS	1144	16.456	21.972	5.089	1.00	25.00
	ATOM	2576	CD2	HIS	1144	18.305	19.683	6.312	1.00	46.14
	ATOM	2577	NE2	HIS	1144	18.484	19.484	4.972	1.00	47.91
	ATOM	2578	CE1	HIS	1144	17.730	20.452	4.354	1.00	47.95
	ATOM	2579	N	GLY	1145	16.123	17.761	8.018	1.00	45.34
45	ATOM	2580	H	GLY	1145	15.278	18.044	7.647	1.00	25.00
	ATOM	2581	CA	GLY	1145	16.544	16.374	7.953	1.00	45.62
	ATOM	2582	C	GLY	1145	18.010	16.114	7.924	1.00	48.92
	ATOM	2583	O	GLY	1145	18.498	15.144	8.537	1.00	50.46
	ATOM	2584	N	GLU	1146	18.669	16.791	7.026	1.00	50.27
50	ATOM	2585	H	GLU	1146	18.222	17.373	6.396	1.00	25.00
	ATOM	2586	CA	GLU	1146	20.080	16.567	7.029	1.00	54.60
	ATOM	2587	CB	GLU	1146	20.835	16.836	5.694	1.00	58.82
	ATOM	2588	CG	GLU	1146	20.927	15.586	4.779	1.00	65.58
	ATOM	2589	CD	GLU	1146	19.614	15.431	3.977	1.00	69.68
55	ATOM	2590	OE1	GLU	1146	18.652	14.802	4.433	1.00	73.42
	ATOM	2591	OE2	GLU	1146	19.537	15.949	2.869	1.00	69.92
	ATOM	2592	C	GLU	1146	20.623	17.521	8.028	1.00	53.76
	ATOM	2593	O	GLU	1146	20.344	18.726	8.005	1.00	54.34
	ATOM	2594	N	PRO	1147	21.433	16.948	8.901	1.00	53.84
60	ATOM	2595	CD	PRO	1147	21.586	15.498	9.134	1.00	50.10
	ATOM	2596	CA	PRO	1147	22.290	17.742	9.802	1.00	54.29
	ATOM	2597	CB	PRO	1147	23.322	16.612	10.149	1.00	53.82

	ATOM	2598	CG	PRO	1147	23.082	15.480	9.117	1.00	51.48
	ATOM	2599	C	PRO	1147	22.828	19.103	9.224	1.00	53.73
	ATOM	2600	O	PRO	1147	22.417	20.181	9.587	1.00	53.88
	ATOM	2601	N	SER	1148	23.746	19.090	8.264	1.00	54.72
5	ATOM	2602	H	SER	1148	24.082	18.204	8.070	1.00	25.00
	ATOM	2603	CA	SER	1148	24.461	20.203	7.515	1.00	53.18
	ATOM	2604	CB	SER	1148	25.416	19.660	6.447	1.00	56.83
	ATOM	2605	OG	SER	1148	24.654	19.181	5.306	1.00	59.90
	ATOM	2606	HG	SER	1148	25.289	18.927	4.627	1.00	25.00
10	ATOM	2607	C	SER	1148	23.716	21.248	6.742	1.00	50.57
	ATOM	2608	O	SER	1148	24.209	21.990	5.886	1.00	49.52
	ATOM	2609	N	GLN	1149	22.469	21.163	6.900	1.00	48.40
	ATOM	2610	H	GLN	1149	22.070	20.518	7.505	1.00	25.00
	ATOM	2611	CA	GLN	1149	21.651	22.101	6.227	1.00	47.20
15	ATOM	2612	CB	GLN	1149	20.910	21.165	5.319	1.00	49.94
	ATOM	2613	CG	GLN	1149	21.700	20.823	4.047	1.00	51.72
	ATOM	2614	CD	GLN	1149	21.708	22.109	3.247	1.00	52.73
	ATOM	2615	OE1	GLN	1149	20.705	22.603	2.740	1.00	57.15
	ATOM	2616	NE2	GLN	1149	22.803	22.778	3.165	1.00	52.69
20	ATOM	2617	HE21	GLN	1149	23.631	22.497	3.607	1.00	25.00
	ATOM	2618	HE22	GLN	1149	22.742	23.591	2.645	1.00	25.00
	ATOM	2619	C	GLN	1149	20.872	22.905	7.280	1.00	46.54
	ATOM	2620	O	GLN	1149	19.980	23.754	7.058	1.00	46.14
	ATOM	2621	N	ARG	1150	21.077	22.497	8.540	1.00	44.41
25	ATOM	2622	H	ARG	1150	21.646	21.732	8.759	1.00	25.00
	ATOM	2623	CA	ARG	1150	20.438	23.240	9.634	1.00	42.55
	ATOM	2624	CB	ARG	1150	20.484	22.391	10.924	1.00	40.43
	ATOM	2625	CG	ARG	1150	19.663	21.150	10.796	1.00	37.13
	ATOM	2626	CD	ARG	1150	19.553	20.522	12.146	1.00	37.38
30	ATOM	2627	NE	ARG	1150	18.772	19.291	11.874	1.00	38.63
	ATOM	2628	HE	ARG	1150	17.871	19.390	11.468	1.00	25.00
	ATOM	2629	CZ	ARG	1150	19.189	18.013	12.157	1.00	36.07
	ATOM	2630	NH1	ARG	1150	20.367	17.753	12.717	1.00	32.01
	ATOM	2631	HH11	ARG	1150	20.981	18.507	12.938	1.00	25.00
35	ATOM	2632	HH12	ARG	1150	20.620	16.793	12.874	1.00	25.00
	ATOM	2633	NH2	ARG	1150	18.416	16.975	11.789	1.00	34.56
	ATOM	2634	HH21	ARG	1150	17.563	17.161	11.301	1.00	25.00
	ATOM	2635	HH22	ARG	1150	18.689	16.025	11.945	1.00	25.00
	ATOM	2636	C	ARG	1150	21.231	24.592	9.823	1.00	43.83
40	ATOM	2637	O	ARG	1150	22.437	24.732	9.462	1.00	43.72
	ATOM	2638	N	PRO	1151	20.569	25.629	10.428	1.00	42.67
	ATOM	2639	CD	PRO	1151	19.114	25.757	10.735	1.00	41.47
	ATOM	2640	CA	PRO	1151	21.347	26.779	10.954	1.00	41.79
	ATOM	2641	CB	PRO	1151	20.305	27.587	11.663	1.00	42.68
45	ATOM	2642	CG	PRO	1151	18.964	27.254	11.013	1.00	40.68
	ATOM	2643	C	PRO	1151	22.510	26.445	11.895	1.00	42.33
	ATOM	2644	O	PRO	1151	22.465	25.437	12.594	1.00	42.51
	ATOM	2645	N	THR	1152	23.602	27.171	11.916	1.00	40.10
	ATOM	2646	H	THR	1152	23.748	27.920	11.316	1.00	25.00
50	ATOM	2647	CA	THR	1152	24.584	26.860	12.949	1.00	39.68
	ATOM	2648	CB	THR	1152	25.983	27.286	12.613	1.00	42.74
	ATOM	2649	OG1	THR	1152	25.813	28.650	12.227	1.00	47.80
	ATOM	2650	HG1	THR	1152	26.716	28.981	12.086	1.00	25.00
	ATOM	2651	CG2	THR	1152	26.750	26.456	11.545	1.00	41.87
55	ATOM	2652	C	THR	1152	24.176	27.747	14.158	1.00	37.98
	ATOM	2653	O	THR	1152	23.346	28.675	14.044	1.00	36.59
	ATOM	2654	N	PHE	1153	24.801	27.572	15.337	1.00	36.72
	ATOM	2655	H	PHE	1153	25.480	26.872	15.440	1.00	25.00
	ATOM	2656	CA	PHE	1153	24.370	28.444	16.440	1.00	33.91
60	ATOM	2657	CB	PHE	1153	24.915	27.765	17.749	1.00	28.96
	ATOM	2658	CG	PHE	1153	23.897	26.845	18.376	1.00	26.29
	ATOM	2659	CD1	PHE	1153	22.628	27.245	18.795	1.00	23.02

	ATOM	2660	CD2	PHE	1153	24.180	25.480	18.490	1.00	27.42
	ATOM	2661	CE1	PHE	1153	21.653	26.380	19.289	1.00	21.58
	ATOM	2662	CE2	PHE	1153	23.204	24.612	18.989	1.00	22.10
	ATOM	2663	CZ	PHE	1153	21.965	25.051	19.381	1.00	17.48
5	ATOM	2664	C	PHE	1153	24.889	29.879	16.103	1.00	34.27
	ATOM	2665	O	PHE	1153	24.243	30.871	16.383	1.00	29.84
	ATOM	2666	N	SER	1154	26.014	30.041	15.399	1.00	35.98
	ATOM	2667	H	SER	1154	26.507	29.232	15.167	1.00	25.00
	ATOM	2668	CA	SER	1154	26.517	31.432	15.028	1.00	38.48
10	ATOM	2669	CB	SER	1154	27.893	31.254	14.380	1.00	39.87
	ATOM	2670	OG	SER	1154	28.816	30.455	15.219	1.00	38.56
	ATOM	2671	HG	SER	1154	29.614	30.251	14.714	1.00	25.00
	ATOM	2672	C	SER	1154	25.520	32.211	14.127	1.00	38.31
	ATOM	2673	O	SER	1154	25.121	33.343	14.431	1.00	40.78
15	ATOM	2674	N	GLU	1155	24.996	31.610	13.093	1.00	35.94
	ATOM	2675	H	GLU	1155	25.280	30.690	12.923	1.00	25.00
	ATOM	2676	CA	GLU	1155	23.988	32.274	12.309	1.00	32.96
	ATOM	2677	CB	GLU	1155	23.626	31.511	11.177	1.00	37.45
	ATOM	2678	CG	GLU	1155	24.850	31.023	10.437	1.00	43.51
20	ATOM	2679	CD	GLU	1155	24.399	29.902	9.504	1.00	46.96
	ATOM	2680	OE1	GLU	1155	25.310	29.165	9.071	1.00	50.41
	ATOM	2681	OE2	GLU	1155	23.174	29.774	9.233	1.00	45.70
	ATOM	2682	C	GLU	1155	22.749	32.393	13.103	1.00	31.69
	ATOM	2683	O	GLU	1155	21.990	33.275	12.792	1.00	31.93
25	ATOM	2684	N	LEU	1156	22.326	31.477	13.946	1.00	30.61
	ATOM	2685	H	LEU	1156	22.751	30.604	14.002	1.00	25.00
	ATOM	2686	CA	LEU	1156	21.132	31.740	14.761	1.00	29.56
	ATOM	2687	CB	LEU	1156	20.789	30.550	15.503	1.00	27.75
	ATOM	2688	CG	LEU	1156	20.180	29.409	14.650	1.00	26.38
30	ATOM	2689	CD1	LEU	1156	20.209	28.026	15.442	1.00	23.83
	ATOM	2690	CD2	LEU	1156	18.707	29.666	14.410	1.00	19.77
	ATOM	2691	C	LEU	1156	21.300	32.894	15.783	1.00	30.48
	ATOM	2692	O	LEU	1156	20.353	33.434	16.353	1.00	34.15
	ATOM	2693	N	VAL	1157	22.501	33.269	16.207	1.00	32.36
35	ATOM	2694	H	VAL	1157	23.281	32.770	15.909	1.00	25.00
	ATOM	2695	CA	VAL	1157	22.702	34.447	17.096	1.00	31.69
	ATOM	2696	CB	VAL	1157	24.188	34.541	17.625	1.00	31.12
	ATOM	2697	CG1	VAL	1157	24.461	35.828	18.434	1.00	29.72
	ATOM	2698	CG2	VAL	1157	24.414	33.474	18.695	1.00	26.93
40	ATOM	2699	C	VAL	1157	22.427	35.689	16.161	1.00	32.74
	ATOM	2700	O	VAL	1157	21.539	36.563	16.409	1.00	31.94
	ATOM	2701	N	GLU	1158	23.190	35.628	15.010	1.00	33.47
	ATOM	2702	H	GLU	1158	23.818	34.854	14.912	1.00	25.00
	ATOM	2703	CA	GLU	1158	23.128	36.698	13.942	1.00	36.69
45	ATOM	2704	CB	GLU	1158	23.968	36.147	12.752	1.00	39.75
	ATOM	2705	CG	GLU	1158	23.927	36.616	11.273	1.00	49.25
	ATOM	2706	CD	GLU	1158	25.128	36.142	10.367	1.00	52.53
	ATOM	2707	OE1	GLU	1158	25.653	35.026	10.525	1.00	56.14
	ATOM	2708	OE2	GLU	1158	25.526	36.909	9.474	1.00	51.73
50	ATOM	2709	C	GLU	1158	21.688	36.989	13.620	1.00	35.87
	ATOM	2710	O	GLU	1158	21.085	38.021	13.992	1.00	37.92
	ATOM	2711	N	HIS	1159	21.031	35.955	13.143	1.00	34.16
	ATOM	2712	H	HIS	1159	21.505	35.115	13.022	1.00	25.00
	ATOM	2713	CA	HIS	1159	19.648	36.091	12.765	1.00	33.52
55	ATOM	2714	C	HIS	1159	18.679	36.455	13.833	1.00	34.58
	ATOM	2715	O	HIS	1159	17.888	37.407	13.671	1.00	36.50
	ATOM	2716	CB	HIS	1159	19.270	34.813	12.068	1.00	35.94
	ATOM	2717	CG	HIS	1159	17.850	34.751	11.646	1.00	38.95
	ATOM	2718	ND1	HIS	1159	16.839	34.072	12.310	1.00	41.78
60	ATOM	2719	HD1	HIS	1159	16.900	33.563	13.134	1.00	25.00
	ATOM	2720	CD2	HIS	1159	17.320	35.405	10.568	1.00	37.44
	ATOM	2721	NE2	HIS	1159	16.003	35.077	10.649	1.00	40.99

	ATOM	2722	CE1	HIS	1159	15.667	34.274	11.688	1.00	39.22
	ATOM	2723	N	LEU	1160	18.600	35.674	14.902	1.00	33.23
	ATOM	2724	H	LEU	1160	19.255	34.967	15.063	1.00	25.00
	ATOM	2725	CA	LEU	1160	17.656	36.064	15.961	1.00	31.25
5	ATOM	2726	CB	LEU	1160	17.789	35.009	17.043	1.00	28.95
	ATOM	2727	CG	LEU	1160	16.906	33.877	16.776	1.00	27.75
	ATOM	2728	CD1	LEU	1160	17.513	32.761	17.628	1.00	28.12
	ATOM	2729	CD2	LEU	1160	15.422	34.234	17.016	1.00	25.31
	ATOM	2730	C	LEU	1160	17.964	37.509	16.455	1.00	31.35
10	ATOM	2731	O	LEU	1160	17.013	38.221	16.766	1.00	31.81
	ATOM	2732	N	GLY	1161	19.236	37.983	16.504	1.00	31.88
	ATOM	2733	H	GLY	1161	19.936	37.353	16.289	1.00	25.00
	ATOM	2734	CA	GLY	1161	19.654	39.404	16.858	1.00	33.53
	ATOM	2735	C	GLY	1161	19.000	40.399	15.843	1.00	32.51
15	ATOM	2736	O	GLY	1161	18.265	41.318	16.239	1.00	32.68
	ATOM	2737	N	ASN	1162	19.215	40.234	14.512	1.00	32.51
	ATOM	2738	H	ASN	1162	19.789	39.475	14.234	1.00	25.00
	ATOM	2739	CA	ASN	1162	18.500	41.110	13.507	1.00	33.28
	ATOM	2740	CB	ASN	1162	18.514	40.653	12.073	1.00	35.11
20	ATOM	2741	CG	ASN	1162	19.831	40.177	11.438	1.00	39.94
	ATOM	2742	OD1	ASN	1162	20.996	40.519	11.709	1.00	40.26
	ATOM	2743	ND2	ASN	1162	19.651	39.315	10.436	1.00	44.47
	ATOM	2744	HD21	ASN	1162	18.764	39.022	10.157	1.00	25.00
	ATOM	2745	HD22	ASN	1162	20.430	38.960	9.965	1.00	25.00
25	ATOM	2746	C	ASN	1162	17.006	41.043	13.810	1.00	34.66
	ATOM	2747	O	ASN	1162	16.248	42.013	13.740	1.00	35.08
	ATOM	2748	N	LEU	1163	16.495	39.864	14.142	1.00	36.92
	ATOM	2749	H	LEU	1163	17.054	39.067	14.082	1.00	25.00
	ATOM	2750	CA	LEU	1163	15.082	39.752	14.484	1.00	38.43
30	ATOM	2751	CB	LEU	1163	14.770	38.292	14.623	1.00	39.60
	ATOM	2752	CG	LEU	1163	13.909	37.970	13.369	1.00	43.41
	ATOM	2753	CD1	LEU	1163	14.877	37.594	12.257	1.00	42.19
	ATOM	2754	CD2	LEU	1163	12.839	36.884	13.652	1.00	45.22
	ATOM	2755	C	LEU	1163	14.631	40.516	15.718	1.00	39.37
35	ATOM	2756	O	LEU	1163	13.487	40.926	15.978	1.00	37.59
	ATOM	2757	N	LEU	1164	15.572	40.740	16.597	1.00	41.87
	ATOM	2758	H	LEU	1164	16.468	40.369	16.447	1.00	25.00
	ATOM	2759	CA	LEU	1164	15.249	41.440	17.885	1.00	42.02
	ATOM	2760	CB	LEU	1164	16.307	40.978	18.916	1.00	37.06
40	ATOM	2761	CG	LEU	1164	16.026	41.240	20.374	1.00	31.15
	ATOM	2762	CD1	LEU	1164	14.644	40.956	20.887	1.00	25.26
	ATOM	2763	CD2	LEU	1164	17.124	40.412	20.997	1.00	31.26
	ATOM	2764	C	LEU	1164	15.202	42.947	17.635	1.00	44.08
	ATOM	2765	O	LEU	1164	14.453	43.695	18.290	1.00	43.41
45	ATOM	2766	N	GLN	1165	16.009	43.341	16.621	1.00	44.38
	ATOM	2767	H	GLN	1165	16.606	42.676	16.249	1.00	25.00
	ATOM	2768	CA	GLN	1165	16.077	44.750	16.120	1.00	47.22
	ATOM	2769	CB	GLN	1165	17.151	45.038	15.096	1.00	43.66
	ATOM	2770	CG	GLN	1165	18.500	45.156	15.672	1.00	45.54
50	ATOM	2771	CD	GLN	1165	19.384	44.642	14.573	1.00	47.69
	ATOM	2772	OE1	GLN	1165	19.271	45.094	13.476	1.00	51.63
	ATOM	2773	NE2	GLN	1165	20.351	43.767	14.681	1.00	48.73
	ATOM	2774	HE21	GLN	1165	20.571	43.355	15.527	1.00	25.00
	ATOM	2775	HE22	GLN	1165	20.848	43.516	13.881	1.00	25.00
55	ATOM	2776	C	GLN	1165	14.800	44.975	15.336	1.00	49.42
	ATOM	2777	O	GLN	1165	14.068	45.927	15.539	1.00	48.42
	ATOM	2778	N	ALA	1166	14.505	43.989	14.467	1.00	52.59
	ATOM	2779	H	ALA	1166	15.155	43.285	14.330	1.00	25.00
	ATOM	2780	CA	ALA	1166	13.303	44.083	13.686	1.00	54.52
60	ATOM	2781	CB	ALA	1166	13.114	42.736	12.967	1.00	55.73
	ATOM	2782	C	ALA	1166	12.171	44.474	14.673	1.00	56.17
	ATOM	2783	O	ALA	1166	11.315	45.168	14.139	1.00	57.69

	ATOM	2784	N	ASN	1167	11.897	44.077	15.970	1.00	57.55
	ATOM	2785	H	ASN	1167	12.336	43.316	16.381	1.00	25.00
	ATOM	2786	CA	ASN	1167	10.747	44.894	16.586	1.00	61.20
	ATOM	2787	CB	ASN	1167	10.286	44.841	18.052	1.00	56.92
5	ATOM	2788	CG	ASN	1167	10.376	43.523	18.647	1.00	55.45
	ATOM	2789	OD1	ASN	1167	9.421	43.081	19.264	1.00	52.04
	ATOM	2790	ND2	ASN	1167	11.526	42.906	18.533	1.00	55.32
	ATOM	2791	HD21	ASN	1167	12.286	43.330	18.079	1.00	25.00
	ATOM	2792	HD22	ASN	1167	11.636	42.015	18.923	1.00	25.00
10	ATOM	2793	C	ASN	1167	11.441	46.257	16.693	1.00	65.53
	ATOM	2794	O	ASN	1167	12.217	46.464	17.631	1.00	65.97
	ATOM	2795	N	ALA	1168	11.123	47.131	15.719	1.00	70.77
	ATOM	2796	H	ALA	1168	10.503	46.801	15.041	1.00	25.00
	ATOM	2797	CA	ALA	1168	11.667	48.504	15.457	1.00	75.85
15	ATOM	2798	CB	ALA	1168	11.801	49.193	16.909	1.00	77.04
	ATOM	2799	C	ALA	1168	12.986	48.694	14.533	1.00	79.11
	ATOM	2800	O	ALA	1168	14.015	49.296	14.919	1.00	79.05
	ATOM	2802	C01	INH	1	17.151	26.972	40.312	1.00	22.71
	ATOM	2803	C02	INH	1	19.307	26.773	39.701	1.00	21.43
20	ATOM	2804	N03	INH	1	20.747	27.150	39.703	1.00	19.88
	ATOM	2805	C04	INH	1	18.795	25.474	39.437	1.00	21.90
	ATOM	2806	S05	INH	1	17.144	25.377	39.846	1.00	25.57
	ATOM	2807	N06	INH	1	18.337	27.565	40.189	1.00	20.58
	ATOM	2808	N07	INH	1	15.973	27.739	40.426	1.00	23.47
25	ATOM	2809	H08	INH	1	16.095	28.713	40.518	1.00	20.00
	ATOM	2810	C09	INH	1	12.245	26.442	40.837	1.00	25.76
	ATOM	2811	C10	INH	1	12.695	27.588	41.522	1.00	29.62
	ATOM	2812	C11	INH	1	13.067	25.692	40.045	1.00	23.52
	ATOM	2813	C12	INH	1	14.405	26.130	39.845	1.00	19.77
30	ATOM	2814	C13	INH	1	14.783	27.313	40.490	1.00	21.73
	ATOM	2815	C14	INH	1	13.994	28.067	41.341	1.00	21.36
	ATOM	2816	O15	INH	1	11.796	28.191	42.482	1.00	33.04
	ATOM	2817	C16	INH	1	12.396	28.964	43.538	1.00	36.57
	ATOM	2818	O17	INH	1	10.927	25.968	41.005	1.00	31.21
35	ATOM	2819	C18	INH	1	10.595	25.102	42.094	1.00	33.21
	ATOM	2820	O19	INH	1	12.510	24.556	39.346	1.00	20.43
	ATOM	2821	C20	INH	1	13.536	23.806	38.628	1.00	21.64
	ATOM	2822	S21	INH	1	18.921	23.101	37.905	1.00	22.21
	ATOM	2823	C22	INH	1	20.445	22.474	37.533	1.00	14.62
40	ATOM	2824	C23	INH	1	21.461	23.244	38.101	1.00	9.96
	ATOM	2825	N24	INH	1	21.023	24.312	38.749	1.00	16.26
	ATOM	2826	C25	INH	1	19.631	24.400	38.738	1.00	22.61
	ATOM	2827	H26	INH	1	21.428	26.468	39.493	1.00	20.00
	ATOM	2828	H27	INH	1	21.059	28.062	39.918	1.00	20.00
45	ATOM	2829	C28	INH	1	22.854	22.770	38.188	1.00	6.00
	ATOM	2830	C29	INH	1	23.554	22.960	39.319	1.00	7.53
	ATOM	2831	C30	INH	1	24.960	22.693	39.322	1.00	9.59
	ATOM	2832	C31	INH	1	25.620	22.233	38.165	1.00	9.41
	ATOM	2833	C32	INH	1	24.809	22.066	37.016	1.00	10.26
50	ATOM	2834	C33	INH	1	23.460	22.293	37.060	1.00	6.27
	ATOM	2835	N34	INH	1	25.356	21.687	35.834	1.00	16.25
	ATOM	2836	C35	INH	1	25.020	22.180	34.628	1.00	18.70
	ATOM	2837	C36	INH	1	25.703	21.672	33.526	1.00	22.75
	ATOM	2838	O37	INH	1	24.122	22.990	34.473	1.00	21.96
55	ATOM	2839	S38	INH	1	26.621	20.256	33.532	1.00	24.41
	ATOM	2840	C39	INH	1	27.266	20.562	32.021	1.00	18.53
	ATOM	2841	N40	INH	1	26.820	21.677	31.428	1.00	23.87
	ATOM	2842	C41	INH	1	25.934	22.383	32.227	1.00	27.04
	ATOM	2843	C43	INH	1	28.223	19.731	31.543	1.00	15.38
60	ATOM	2844	C45	INH	1	25.317	23.634	31.575	1.00	23.30
	ATOM	2845	H42	INH	1	26.124	21.069	35.894	1.00	20.00
	ATOM	2846	H44	INH	1	27.102	22.016	30.556	1.00	20.00

	ATOM	2847	OH2	WAT	2	27.966	38.271	26.224	1.00	50.18
	ATOM	2850	OH2	WAT	3	28.856	36.562	28.753	1.00	36.62
	ATOM	2853	OH2	WAT	4	29.078	38.519	31.104	1.00	37.39
	ATOM	2856	OH2	WAT	5	23.273	37.357	34.794	1.00	33.83
5	ATOM	2859	OH2	WAT	6	24.406	36.211	37.654	1.00	30.57
	ATOM	2862	OH2	WAT	7	21.978	35.767	41.203	1.00	37.54
	ATOM	2865	OH2	WAT	8	23.964	38.874	47.741	1.00	35.11
	ATOM	2868	OH2	WAT	9	22.923	39.472	51.359	1.00	36.64
	ATOM	2871	OH2	WAT	10	20.306	36.349	50.634	1.00	35.84
10	ATOM	2874	OH2	WAT	11	18.982	28.226	53.618	1.00	37.76
	ATOM	2877	OH2	WAT	12	17.377	28.974	51.631	1.00	37.48
	ATOM	2880	OH2	WAT	13	14.942	27.238	51.083	1.00	41.19
	ATOM	2883	OH2	WAT	14	17.577	26.045	55.498	1.00	34.29
	ATOM	2886	OH2	WAT	15	36.108	27.236	57.172	1.00	53.58
15	ATOM	2889	OH2	WAT	16	38.382	27.243	55.334	1.00	52.34
	ATOM	2892	OH2	WAT	17	34.636	22.251	51.437	1.00	29.32
	ATOM	2895	OH2	WAT	18	34.038	14.843	47.808	1.00	34.70
	ATOM	2898	OH2	WAT	19	26.991	14.911	46.063	1.00	27.30
	ATOM	2901	OH2	WAT	20	18.754	17.171	32.123	1.00	36.20
20	ATOM	2904	OH2	WAT	21	19.251	14.538	31.049	1.00	45.30
	ATOM	2907	OH2	WAT	22	14.024	17.517	38.625	1.00	41.78
	ATOM	2910	OH2	WAT	23	9.849	21.389	35.429	1.00	48.32
	ATOM	2913	OH2	WAT	24	9.860	25.939	38.285	1.00	29.88
	ATOM	2916	OH2	WAT	25	3.634	26.658	35.234	1.00	33.33
25	ATOM	2919	OH2	WAT	26	8.689	20.356	29.885	1.00	29.44
	ATOM	2922	OH2	WAT	27	6.500	21.783	29.005	1.00	32.35
	ATOM	2925	OH2	WAT	28	10.864	21.594	28.632	1.00	34.00
	ATOM	2928	OH2	WAT	29	0.881	20.324	23.776	1.00	44.70
	ATOM	2931	OH2	WAT	30	0.260	22.146	27.399	1.00	31.57
30	ATOM	2934	OH2	WAT	31	-0.963	24.683	24.000	1.00	36.16
	ATOM	2937	OH2	WAT	32	0.231	27.057	22.905	1.00	39.97
	ATOM	2940	OH2	WAT	33	13.321	38.277	35.165	1.00	36.99
	ATOM	2943	OH2	WAT	34	13.831	40.752	37.922	1.00	38.20
	ATOM	2946	OH2	WAT	35	13.008	42.215	27.076	1.00	27.46
35	ATOM	2949	OH2	WAT	36	30.995	32.551	21.401	1.00	30.39
	ATOM	2952	OH2	WAT	37	27.563	34.735	14.899	1.00	38.01
	ATOM	2955	OH2	WAT	38	26.409	38.349	14.046	1.00	32.17
	ATOM	2958	OH2	WAT	39	23.172	40.263	13.330	1.00	32.58
	ATOM	2961	OH2	WAT	40	27.296	37.643	7.531	1.00	42.86
40	ATOM	2964	OH2	WAT	41	10.515	40.627	15.078	1.00	54.13
	ATOM	2967	OH2	WAT	42	6.935	42.617	21.482	1.00	39.20
	ATOM	2970	OH2	WAT	43	2.704	19.829	10.061	1.00	42.70
	ATOM	2973	OH2	WAT	44	2.910	17.439	14.108	1.00	50.97
	ATOM	2976	OH2	WAT	45	12.227	13.957	17.403	1.00	42.17
45	ATOM	2979	OH2	WAT	46	19.976	19.003	22.470	1.00	32.21
	ATOM	2982	OH2	WAT	47	18.425	16.374	22.408	1.00	44.27
	ATOM	2985	OH2	WAT	48	16.351	16.989	24.174	1.00	32.08
	ATOM	2988	OH2	WAT	49	29.280	28.865	11.379	1.00	31.84
	ATOM	2991	OH2	WAT	50	3.845	8.241	24.677	1.00	47.02
50	ATOM	2994	OH2	WAT	51	2.725	7.689	16.533	1.00	44.34
	ATOM	2997	OH2	WAT	52	31.693	30.318	36.660	1.00	40.72
	ATOM	3000	OH2	WAT	53	29.539	28.211	34.664	1.00	39.56
	ATOM	3003	OH2	WAT	54	28.825	30.408	32.733	1.00	32.41
	ATOM	3006	OH2	WAT	55	35.936	32.734	32.431	1.00	58.04
55	ATOM	3009	OH2	WAT	56	14.384	8.387	38.239	1.00	43.35
	ATOM	3012	OH2	WAT	57	39.167	22.075	34.568	1.00	32.92
	ATOM	3015	OH2	WAT	58	34.260	29.516	45.225	1.00	37.65
	ATOM	3018	OH2	WAT	59	35.548	31.839	43.164	1.00	44.19
	ATOM	3021	OH2	WAT	60	18.751	14.924	19.508	1.00	49.70
60	ATOM	3024	OH2	WAT	61	17.328	15.609	34.116	1.00	32.21
	ATOM	3027	OH2	WAT	62	22.450	15.060	28.894	1.00	36.17
	ATOM	3030	OH2	WAT	63	26.253	15.965	27.429	1.00	38.78

	ATOM	3033	OH2	WAT	64	26.509	21.379	28.735	1.00	32.46
	ATOM	3036	OH2	WAT	65	28.092	19.813	27.451	1.00	34.48
	ATOM	3039	OH2	WAT	66	29.164	17.735	29.558	1.00	36.91
	ATOM	3042	OH2	WAT	67	25.664	16.483	33.243	1.00	42.67
5	ATOM	3045	OH2	WAT	68	24.941	18.926	29.116	1.00	28.51
	ATOM	3048	OH2	WAT	69	34.994	20.636	26.303	1.00	43.54
	ATOM	3051	OH2	WAT	70	40.602	24.336	33.677	1.00	42.86
	ATOM	3054	OH2	WAT	71	40.597	27.093	36.147	1.00	43.89
	ATOM	3057	OH2	WAT	72	32.779	32.341	42.719	1.00	38.08
10	ATOM	3060	OH2	WAT	73	27.925	38.396	34.138	1.00	46.14
	ATOM	3063	OH2	WAT	74	21.817	37.396	37.399	1.00	41.12
	ATOM	3066	OH2	WAT	75	20.919	33.985	39.300	1.00	35.31
	ATOM	3069	OH2	WAT	76	17.914	34.673	39.324	1.00	41.00
	ATOM	3072	OH2	WAT	77	8.919	39.949	32.093	1.00	47.82
15	ATOM	3075	OH2	WAT	78	20.998	6.902	7.966	1.00	38.15
	ATOM	3078	OH2	WAT	79	20.826	2.603	9.908	1.00	33.85
	ATOM	3081	OH2	WAT	80	10.488	3.590	13.531	1.00	49.48
	ATOM	3084	OH2	WAT	81	7.992	2.065	11.817	1.00	42.13
	ATOM	3087	OH2	WAT	82	1.638	3.175	16.932	1.00	42.93
20	ATOM	3090	OH2	WAT	83	10.071	12.935	24.586	1.00	36.64
	ATOM	3093	OH2	WAT	84	7.441	22.879	26.929	1.00	32.29
	ATOM	3096	OH2	WAT	85	8.144	21.854	32.161	1.00	36.88
	ATOM	3099	OH2	WAT	86	6.824	46.218	22.293	1.00	39.60
	ATOM	3102	OH2	WAT	87	26.700	13.448	34.816	1.00	40.37
25	ATOM	3105	OH2	WAT	88	37.159	13.710	35.996	1.00	43.43
	ATOM	3108	OH2	WAT	89	35.932	12.237	38.828	1.00	39.31
	ATOM	3111	OH2	WAT	90	33.865	9.983	35.467	1.00	39.72
	ATOM	3114	OH2	WAT	91	45.889	17.101	32.564	1.00	43.03
	ATOM	3117	OH2	WAT	92	36.436	30.624	29.203	1.00	42.87
30	ATOM	3120	OH2	WAT	93	32.251	34.336	23.718	1.00	46.02
	ATOM	3123	OH2	WAT	94	12.385	30.105	46.682	1.00	40.25
	ATOM	3126	OH2	WAT	95	29.296	12.883	47.074	1.00	38.02
	ATOM	3129	OH2	WAT	96	32.476	10.443	48.316	1.00	36.84
	ATOM	3132	OH2	WAT	97	20.768	35.478	8.527	1.00	40.94
35	ATOM	3135	OH2	WAT	98	37.510	22.922	24.948	1.00	38.30

TABLE 4

Atomic Coordinates for  
**VEGFR2KD: 4-Fluoro-3-[5-(2-methoxy-pyridin-4-ylamino)-2H-pyrazol-3-ylmethoxy]-N-(3-N-imidazole-3-trifluoromethyl-phenyl)-benzamide (Compound 4)**  
 Complex Crystalline Structure

40										
45	ATOM	1	CB	GLU	815	34.800	16.822	26.764	1.00	46.59
	ATOM	2	CG	GLU	815	33.498	17.663	27.328	1.00	46.62
	ATOM	3	CD	GLU	815	32.035	17.698	26.660	1.00	46.58
	ATOM	4	OE1	GLU	815	31.068	18.129	27.336	1.00	46.09
50	ATOM	5	OE2	GLU	815	31.865	17.349	25.486	1.00	40.45
	ATOM	6	C	GLU	815	36.568	14.917	27.768	1.00	47.33
	ATOM	7	O	GLU	815	37.377	15.815	28.061	1.00	47.26
	ATOM	8	HT1	GLU	815	34.080	15.224	28.891	1.00	0.00
	ATOM	9	HT2	GLU	815	33.837	13.833	27.917	1.00	0.00
55	ATOM	10	N	GLU	815	33.958	14.862	27.921	1.00	42.60
	ATOM	11	HT3	GLU	815	33.114	15.308	27.499	1.00	0.00
	ATOM	12	CA	GLU	815	35.121	15.255	27.099	1.00	45.92
	ATOM	13	N	HIS	816	36.891	13.585	28.026	1.00	46.72
	ATOM	14	H	HIS	816	36.360	12.867	27.630	1.00	0.00
60	ATOM	15	CA	HIS	816	38.151	13.047	28.690	1.00	45.51
	ATOM	16	C	HIS	816	38.665	13.928	29.882	1.00	43.64
	ATOM	17	O	HIS	816	39.870	14.161	30.161	1.00	40.60

	ATOM	18	CB	HIS	816	39.317	12.826	27.625	1.00	49.50
	ATOM	19	CG	HIS	816	39.360	11.490	26.916	1.00	52.54
	ATOM	20	ND1	HIS	816	38.377	11.005	26.066	1.00	55.10
	ATOM	21	CE1	HIS	816	38.752	9.740	25.628	1.00	53.61
5	ATOM	22	CD2	HIS	816	40.369	10.483	26.989	1.00	53.73
	ATOM	23	NE2	HIS	816	39.969	9.426	26.195	1.00	53.47
	ATOM	24	HE2	HIS	816	40.434	8.590	25.970	1.00	0.00
	ATOM	25	N	CYS	817	37.608	14.241	30.723	1.00	41.15
	ATOM	26	H	CYS	817	36.765	13.790	30.514	1.00	0.00
10	ATOM	27	CA	CYS	817	37.714	15.132	31.953	1.00	38.77
	ATOM	28	CB	CYS	817	36.370	15.449	32.643	1.00	36.85
	ATOM	29	SG	CYS	817	35.510	16.168	31.344	1.00	38.08
	ATOM	30	C	CYS	817	38.578	14.761	33.124	1.00	36.17
	ATOM	31	O	CYS	817	38.978	15.650	33.848	1.00	34.59
15	ATOM	32	N	GLU	818	38.851	13.483	33.379	1.00	34.64
	ATOM	33	H	GLU	818	38.426	12.860	32.771	1.00	0.00
	ATOM	34	CA	GLU	818	39.697	13.055	34.548	1.00	32.96
	ATOM	35	CB	GLU	818	39.809	11.541	34.587	1.00	30.96
	ATOM	36	CG	GLU	818	38.455	10.849	34.439	1.00	30.36
20	ATOM	37	CD	GLU	818	37.881	10.805	33.001	1.00	31.72
	ATOM	38	OE1	GLU	818	36.687	10.496	32.914	1.00	35.26
	ATOM	39	OE2	GLU	818	38.559	11.041	31.989	1.00	33.10
	ATOM	40	C	GLU	818	41.085	13.646	34.521	1.00	33.17
	ATOM	41	O	GLU	818	41.724	13.842	35.556	1.00	34.36
25	ATOM	42	N	ARG	819	41.565	13.911	33.287	1.00	32.94
	ATOM	43	H	ARG	819	41.006	13.667	32.526	1.00	0.00
	ATOM	44	CA	ARG	819	42.927	14.510	33.036	1.00	34.53
	ATOM	45	CB	ARG	819	43.275	14.253	31.548	1.00	35.22
	ATOM	46	C	ARG	819	43.065	16.061	33.346	1.00	35.31
30	ATOM	47	O	ARG	819	44.142	16.685	33.496	1.00	32.77
	ATOM	48	N	LEU	820	41.856	16.687	33.318	1.00	34.63
	ATOM	49	H	LEU	820	41.083	16.103	33.303	1.00	0.00
	ATOM	50	CA	LEU	820	41.640	18.138	33.530	1.00	33.39
	ATOM	51	CB	LEU	820	40.092	18.401	33.217	1.00	30.45
35	ATOM	52	CG	LEU	820	39.572	19.295	31.983	1.00	28.57
	ATOM	53	CD1	LEU	820	40.613	19.194	30.895	1.00	26.55
	ATOM	54	CD2	LEU	820	38.181	18.889	31.450	1.00	24.01
	ATOM	55	C	LEU	820	42.102	18.553	34.948	1.00	32.30
	ATOM	56	O	LEU	820	42.044	17.787	35.911	1.00	31.15
40	ATOM	57	N	PRO	821	42.638	19.778	35.096	1.00	33.12
	ATOM	58	CD	PRO	821	43.020	20.776	34.023	1.00	33.16
	ATOM	59	CA	PRO	821	43.140	20.189	36.417	1.00	32.03
	ATOM	60	CB	PRO	821	44.282	21.214	36.048	1.00	32.33
	ATOM	61	CG	PRO	821	43.720	21.936	34.814	1.00	29.90
45	ATOM	62	C	PRO	821	42.086	20.767	37.412	1.00	30.65
	ATOM	63	O	PRO	821	41.023	21.322	37.053	1.00	29.94
	ATOM	64	N	TYR	822	42.483	20.685	38.687	1.00	27.33
	ATOM	65	H	TYR	822	43.292	20.177	38.904	1.00	0.00
	ATOM	66	CA	TYR	822	41.721	21.240	39.785	1.00	24.81
50	ATOM	67	CB	TYR	822	41.081	20.226	40.793	1.00	25.41
	ATOM	68	CG	TYR	822	40.384	21.021	41.869	1.00	22.51
	ATOM	69	CD1	TYR	822	40.679	20.883	43.227	1.00	18.07
	ATOM	70	CE1	TYR	822	39.959	21.650	44.161	1.00	19.24
	ATOM	71	CD2	TYR	822	39.379	21.932	41.478	1.00	23.06
55	ATOM	72	CE2	TYR	822	38.646	22.696	42.388	1.00	18.76
	ATOM	73	CZ	TYR	822	38.938	22.549	43.726	1.00	20.36
	ATOM	74	OH	TYR	822	38.119	23.236	44.593	1.00	19.65
	ATOM	75	HH	TYR	822	38.414	23.127	45.491	1.00	0.00
	ATOM	76	C	TYR	822	42.658	22.105	40.622	1.00	25.10
60	ATOM	77	O	TYR	822	43.446	21.653	41.459	1.00	24.32
	ATOM	78	N	ASP	823	42.575	23.426	40.392	1.00	24.75
	ATOM	79	H	ASP	823	41.882	23.779	39.805	1.00	0.00



	ATOM	80	CA	ASP	823	43.378	24.409	41.161	1.00	22.17
	ATOM	81	CB	ASP	823	43.642	25.657	40.305	1.00	22.37
	ATOM	82	CG	ASP	823	44.491	26.633	41.053	1.00	22.47
	ATOM	83	OD1	ASP	823	44.944	26.338	42.155	1.00	24.53
5	ATOM	84	OD2	ASP	823	44.730	27.694	40.503	1.00	25.99
	ATOM	85	C	ASP	823	42.633	24.828	42.431	1.00	20.89
	ATOM	86	O	ASP	823	41.880	25.821	42.492	1.00	19.33
	ATOM	87	N	ALA	824	42.869	24.048	43.466	1.00	20.04
	ATOM	88	H	ALA	824	43.422	23.254	43.287	1.00	0.00
10	ATOM	89	CA	ALA	824	42.232	24.285	44.774	1.00	21.83
	ATOM	90	CB	ALA	824	42.715	23.253	45.773	1.00	20.57
	ATOM	91	C	ALA	824	42.463	25.658	45.377	1.00	21.82
	ATOM	92	O	ALA	824	41.643	26.236	46.090	1.00	20.41
	ATOM	93	N	SER	825	43.647	26.194	45.079	1.00	26.56
15	ATOM	94	H	SER	825	44.301	25.702	44.556	1.00	0.00
	ATOM	95	CA	SER	825	43.958	27.545	45.618	1.00	28.39
	ATOM	96	CB	SER	825	45.487	27.985	45.374	1.00	28.50
	ATOM	97	OG	SER	825	45.995	28.035	44.039	1.00	33.76
	ATOM	98	HG	SER	825	46.932	28.276	44.069	1.00	0.00
20	ATOM	99	C	SER	825	43.005	28.541	45.010	1.00	25.80
	ATOM	100	O	SER	825	42.664	29.562	45.605	1.00	27.55
	ATOM	101	N	LYS	826	42.539	28.199	43.815	1.00	23.23
	ATOM	102	H	LYS	826	42.822	27.377	43.372	1.00	0.00
	ATOM	103	CA	LYS	826	41.623	29.098	43.217	1.00	19.59
25	ATOM	104	CB	LYS	826	41.735	29.092	41.697	1.00	17.73
	ATOM	105	CG	LYS	826	40.851	30.177	41.097	1.00	13.54
	ATOM	106	CD	LYS	826	41.285	30.407	39.654	1.00	16.36
	ATOM	107	CE	LYS	826	40.198	31.223	38.885	1.00	19.53
	ATOM	108	NZ	LYS	826	40.624	31.236	37.497	1.00	21.10
30	ATOM	109	HZ1	LYS	826	40.930	30.294	37.179	1.00	0.00
	ATOM	110	HZ2	LYS	826	41.404	31.918	37.398	1.00	0.00
	ATOM	111	HZ3	LYS	826	39.820	31.544	36.916	1.00	0.00
	ATOM	112	C	LYS	826	40.242	28.760	43.573	1.00	18.66
	ATOM	113	O	LYS	826	39.488	29.619	43.979	1.00	20.62
35	ATOM	114	N	TRP	827	39.875	27.517	43.479	1.00	17.57
	ATOM	115	H	TRP	827	40.525	26.828	43.265	1.00	0.00
	ATOM	116	CA	TRP	827	38.437	27.235	43.699	1.00	16.27
	ATOM	117	CB	TRP	827	37.972	26.192	42.678	1.00	13.24
	ATOM	118	CG	TRP	827	38.279	26.740	41.386	1.00	12.06
40	ATOM	119	CD2	TRP	827	37.448	27.671	40.719	1.00	13.59
	ATOM	120	CE2	TRP	827	38.015	27.872	39.433	1.00	13.90
	ATOM	121	CE3	TRP	827	36.293	28.338	41.067	1.00	11.06
	ATOM	122	CD1	TRP	827	39.360	26.414	40.509	1.00	14.46
	ATOM	123	NE1	TRP	827	39.194	27.118	39.327	1.00	12.29
45	ATOM	124	HE1	TRP	827	39.804	27.329	38.580	1.00	0.00
	ATOM	125	CZ2	TRP	827	37.391	28.745	38.507	1.00	12.54
	ATOM	126	CZ3	TRP	827	35.717	29.194	40.140	1.00	13.63
	ATOM	127	CH2	TRP	827	36.238	29.421	38.866	1.00	14.18
	ATOM	128	C	TRP	827	37.868	26.809	45.016	1.00	18.55
50	ATOM	129	O	TRP	827	36.646	26.943	45.243	1.00	16.68
	ATOM	130	N	GLU	828	38.739	26.219	45.860	1.00	17.02
	ATOM	131	H	GLU	828	39.703	26.300	45.707	1.00	0.00
	ATOM	132	CA	GLU	828	38.194	25.677	47.112	1.00	17.90
	ATOM	133	CB	GLU	828	39.388	24.955	47.746	1.00	18.43
55	ATOM	134	CG	GLU	828	39.039	24.020	48.920	1.00	17.69
	ATOM	135	CD	GLU	828	38.368	22.754	48.466	1.00	21.44
	ATOM	136	OE1	GLU	828	37.665	22.214	49.296	1.00	22.61
	ATOM	137	OE2	GLU	828	38.558	22.294	47.342	1.00	22.13
	ATOM	138	C	GLU	828	37.496	26.645	48.079	1.00	18.19
60	ATOM	139	O	GLU	828	37.993	27.676	48.464	1.00	17.66
	ATOM	140	N	PHE	829	36.364	26.274	48.610	1.00	19.18
	ATOM	141	H	PHE	829	35.972	25.448	48.288	1.00	0.00

	ATOM	142	CA	PHE	829	35.615	27.111	49.551	1.00	20.77
	ATOM	143	CB	PHE	829	34.283	27.549	48.830	1.00	18.59
	ATOM	144	CG	PHE	829	33.580	28.581	49.584	1.00	17.13
	ATOM	145	CD1	PHE	829	34.111	29.864	49.573	1.00	16.92
5	ATOM	146	CD2	PHE	829	32.383	28.284	50.276	1.00	15.90
	ATOM	147	CE1	PHE	829	33.438	30.897	50.256	1.00	16.79
	ATOM	148	CE2	PHE	829	31.729	29.305	50.949	1.00	17.61
	ATOM	149	CZ	PHE	829	32.250	30.619	50.941	1.00	15.35
	ATOM	150	C	PHE	829	35.328	26.377	50.887	1.00	21.99
10	ATOM	151	O	PHE	829	34.838	25.240	50.891	1.00	22.38
	ATOM	152	N	PRO	830	35.578	27.014	52.044	1.00	23.77
	ATOM	153	CD	PRO	830	35.858	28.459	52.242	1.00	23.83
	ATOM	154	CA	PRO	830	35.365	26.345	53.331	1.00	24.88
	ATOM	155	CB	PRO	830	35.780	27.352	54.416	1.00	23.20
15	ATOM	156	CG	PRO	830	36.515	28.424	53.626	1.00	23.46
	ATOM	157	C	PRO	830	33.894	25.949	53.426	1.00	24.94
	ATOM	158	O	PRO	830	32.973	26.719	53.200	1.00	23.66
	ATOM	159	N	ARG	831	33.679	24.682	53.715	1.00	26.51
	ATOM	160	H	ARG	831	34.424	24.071	53.545	1.00	0.00
20	ATOM	161	CA	ARG	831	32.299	24.146	53.816	1.00	27.84
	ATOM	162	CB	ARG	831	32.552	22.539	53.866	1.00	28.49
	ATOM	163	CG	ARG	831	31.535	21.408	53.361	1.00	32.00
	ATOM	164	CD	ARG	831	31.843	20.222	52.306	1.00	28.95
	ATOM	165	NE	ARG	831	33.099	19.650	52.672	1.00	28.62
25	ATOM	166	HE	ARG	831	33.355	19.801	53.606	1.00	0.00
	ATOM	167	CZ	ARG	831	33.964	18.935	51.986	1.00	24.66
	ATOM	168	NH1	ARG	831	34.930	18.708	52.811	1.00	25.83
	ATOM	169	HH11	ARG	831	34.867	19.067	53.745	1.00	0.00
	ATOM	170	HH12	ARG	831	35.741	18.206	52.533	1.00	0.00
30	ATOM	171	NH2	ARG	831	33.977	18.454	50.760	1.00	17.93
	ATOM	172	HH21	ARG	831	33.215	18.641	50.138	1.00	0.00
	ATOM	173	HH22	ARG	831	34.752	17.905	50.446	1.00	0.00
	ATOM	174	C	ARG	831	31.601	24.832	54.993	1.00	26.14
	ATOM	175	O	ARG	831	30.374	25.022	55.102	1.00	26.63
35	ATOM	176	N	ASP	832	32.422	25.310	55.897	1.00	25.97
	ATOM	177	H	ASP	832	33.383	25.321	55.771	1.00	0.00
	ATOM	178	CA	ASP	832	31.836	25.978	57.076	1.00	30.05
	ATOM	179	CB	ASP	832	32.838	26.067	58.296	1.00	33.31
	ATOM	180	CG	ASP	832	33.539	27.401	58.296	1.00	41.72
40	ATOM	181	OD1	ASP	832	34.365	27.577	57.401	1.00	44.84
	ATOM	182	OD2	ASP	832	33.228	28.255	59.157	1.00	50.09
	ATOM	183	C	ASP	832	31.355	27.380	56.735	1.00	28.36
	ATOM	184	O	ASP	832	30.582	27.949	57.492	1.00	29.78
	ATOM	185	N	ARG	833	31.871	27.986	55.670	1.00	25.87
45	ATOM	186	H	ARG	833	32.489	27.506	55.085	1.00	0.00
	ATOM	187	CA	ARG	833	31.422	29.321	55.275	1.00	24.83
	ATOM	188	CB	ARG	833	32.540	29.978	54.528	1.00	26.51
	ATOM	189	CG	ARG	833	33.754	30.005	55.397	1.00	26.46
	ATOM	190	CD	ARG	833	33.986	31.455	55.519	1.00	32.56
50	ATOM	191	NE	ARG	833	35.212	31.855	54.813	1.00	37.21
	ATOM	192	HE	ARG	833	35.144	32.232	53.911	1.00	0.00
	ATOM	193	CZ	ARG	833	36.449	31.714	55.351	1.00	39.61
	ATOM	194	NH1	ARG	833	37.507	32.149	54.636	1.00	41.87
	ATOM	195	HH11	ARG	833	37.363	32.552	53.734	1.00	0.00
55	ATOM	196	HH12	ARG	833	38.429	32.059	55.012	1.00	0.00
	ATOM	197	NH2	ARG	833	36.686	31.116	56.539	1.00	40.59
	ATOM	198	HH21	ARG	833	35.937	30.743	57.090	1.00	0.00
	ATOM	199	HH22	ARG	833	37.621	31.039	56.884	1.00	0.00
	ATOM	200	C	ARG	833	30.159	29.235	54.385	1.00	25.42
60	ATOM	201	O	ARG	833	29.630	30.241	53.872	1.00	24.74
	ATOM	202	N	LEU	834	29.653	28.010	54.220	1.00	23.10
	ATOM	203	H	LEU	834	29.980	27.279	54.778	1.00	0.00

	ATOM	204	CA	LEU	834	28.503	27.748	53.375	1.00	24.99
	ATOM	205	CB	LEU	834	28.924	26.645	52.324	1.00	24.70
	ATOM	206	CG	LEU	834	27.933	26.307	51.208	1.00	23.02
	ATOM	207	CD1	LEU	834	27.749	27.560	50.358	1.00	22.95
5	ATOM	208	CD2	LEU	834	28.441	25.151	50.352	1.00	22.08
	ATOM	209	C	LEU	834	27.292	27.320	54.170	1.00	26.12
	ATOM	210	O	LEU	834	27.356	26.345	54.899	1.00	30.06
	ATOM	211	N	LYS	835	26.200	28.068	54.123	1.00	24.99
	ATOM	212	H	LYS	835	26.280	28.952	53.711	1.00	0.00
10	ATOM	213	CA	LYS	835	24.969	27.699	54.820	1.00	23.53
	ATOM	214	CB	LYS	835	24.285	28.946	55.482	1.00	26.78
	ATOM	215	C	LYS	835	23.942	27.064	53.879	1.00	22.51
	ATOM	216	O	LYS	835	23.306	27.727	53.047	1.00	21.37
	ATOM	217	N	LEU	836	23.735	25.777	53.966	1.00	21.74
15	ATOM	218	H	LEU	836	24.232	25.272	54.647	1.00	0.00
	ATOM	219	CA	LEU	836	22.744	25.116	53.094	1.00	24.15
	ATOM	220	CB	LEU	836	23.011	23.599	53.124	1.00	26.57
	ATOM	221	CG	LEU	836	23.945	22.988	52.011	1.00	27.55
	ATOM	222	CD1	LEU	836	25.142	23.796	51.575	1.00	23.41
20	ATOM	223	CD2	LEU	836	24.456	21.735	52.633	1.00	25.98
	ATOM	224	C	LEU	836	21.281	25.393	53.390	1.00	25.33
	ATOM	225	O	LEU	836	20.877	25.502	54.529	1.00	27.67
	ATOM	226	N	GLY	837	20.429	25.502	52.400	1.00	25.95
	ATOM	227	H	GLY	837	20.786	25.405	51.495	1.00	0.00
25	ATOM	228	CA	GLY	837	19.025	25.763	52.649	1.00	26.93
	ATOM	229	C	GLY	837	18.145	24.764	51.925	1.00	30.38
	ATOM	230	O	GLY	837	18.432	23.567	51.831	1.00	31.75
	ATOM	231	N	LYS	838	17.009	25.257	51.434	1.00	31.50
	ATOM	232	H	LYS	838	16.818	26.198	51.616	1.00	0.00
30	ATOM	233	CA	LYS	838	16.001	24.501	50.686	1.00	32.46
	ATOM	234	CB	LYS	838	14.841	25.452	50.513	1.00	36.07
	ATOM	235	CG	LYS	838	13.587	24.613	50.442	1.00	44.63
	ATOM	236	CD	LYS	838	12.738	24.785	49.141	1.00	50.25
	ATOM	237	CE	LYS	838	11.497	23.808	49.086	1.00	52.36
35	ATOM	238	NZ	LYS	838	10.650	23.970	50.291	1.00	56.10
	ATOM	239	HZ1	LYS	838	10.491	24.982	50.474	1.00	0.00
	ATOM	240	HZ2	LYS	838	11.158	23.561	51.103	1.00	0.00
	ATOM	241	HZ3	LYS	838	9.739	23.483	50.174	1.00	0.00
	ATOM	242	C	LYS	838	16.534	23.973	49.315	1.00	32.28
40	ATOM	243	O	LYS	838	17.271	24.643	48.567	1.00	29.60
	ATOM	244	N	PRO	839	16.166	22.744	48.921	1.00	31.20
	ATOM	245	CD	PRO	839	15.392	21.738	49.660	1.00	32.44
	ATOM	246	CA	PRO	839	16.533	22.239	47.595	1.00	30.83
	ATOM	247	CB	PRO	839	16.274	20.708	47.658	1.00	30.26
45	ATOM	248	CG	PRO	839	15.109	20.643	48.610	1.00	32.64
	ATOM	249	C	PRO	839	15.786	22.930	46.456	1.00	27.62
	ATOM	250	O	PRO	839	14.684	23.467	46.526	1.00	26.87
	ATOM	251	N	LEU	840	16.578	23.096	45.439	1.00	26.69
	ATOM	252	H	LEU	840	17.496	22.833	45.591	1.00	0.00
50	ATOM	253	CA	LEU	840	16.192	23.691	44.162	1.00	22.97
	ATOM	254	CB	LEU	840	17.416	24.507	43.665	1.00	18.74
	ATOM	255	CG	LEU	840	17.703	25.712	44.565	1.00	14.60
	ATOM	256	CD1	LEU	840	18.732	26.608	43.873	1.00	9.35
	ATOM	257	CD2	LEU	840	16.329	26.402	44.901	1.00	14.95
55	ATOM	258	C	LEU	840	15.744	22.560	43.210	1.00	24.05
	ATOM	259	O	LEU	840	14.895	22.748	42.362	1.00	27.38
	ATOM	260	N	GLY	841	16.318	21.378	43.249	1.00	21.91
	ATOM	261	H	GLY	841	17.080	21.233	43.844	1.00	0.00
	ATOM	262	CA	GLY	841	15.857	20.290	42.392	1.00	21.34
60	ATOM	263	C	GLY	841	16.505	19.000	42.865	1.00	25.48
	ATOM	264	O	GLY	841	17.687	19.007	43.323	1.00	24.74
	ATOM	265	N	ARG	842	15.736	17.922	42.986	1.00	25.17

	ATOM	266	H	ARG	842	14.760	17.980	42.895	1.00	0.00
	ATOM	267	CA	ARG	842	16.511	16.739	43.356	1.00	29.39
	ATOM	268	CB	ARG	842	16.487	16.581	44.893	1.00	34.40
	ATOM	269	CG	ARG	842	15.243	16.103	45.567	1.00	41.49
5	ATOM	270	CD	ARG	842	15.405	16.457	47.033	1.00	46.68
	ATOM	271	NE	ARG	842	16.571	15.812	47.651	1.00	53.78
	ATOM	272	HE	ARG	842	17.332	15.525	47.109	1.00	0.00
	ATOM	273	CZ	ARG	842	16.654	15.687	48.997	1.00	59.00
	ATOM	274	NH1	ARG	842	15.665	16.157	49.818	1.00	60.15
10	ATOM	275	HH11	ARG	842	14.858	16.599	49.429	1.00	0.00
	ATOM	276	HH12	ARG	842	15.752	16.051	50.808	1.00	0.00
	ATOM	277	NH2	ARG	842	17.743	15.067	49.529	1.00	61.37
	ATOM	278	HH21	ARG	842	18.468	14.720	48.934	1.00	0.00
	ATOM	279	HH22	ARG	842	17.823	14.963	50.520	1.00	0.00
15	ATOM	280	C	ARG	842	16.125	15.465	42.615	1.00	28.74
	ATOM	281	O	ARG	842	15.010	15.266	42.113	1.00	27.27
	ATOM	282	N	GLY	843	17.226	14.716	42.333	1.00	28.12
	ATOM	283	H	GLY	843	18.061	14.960	42.788	1.00	0.00
	ATOM	284	CA	GLY	843	17.186	13.470	41.578	1.00	25.47
20	ATOM	285	C	GLY	843	17.360	12.307	42.454	1.00	27.01
	ATOM	286	O	GLY	843	17.223	12.388	43.660	1.00	26.48
	ATOM	287	N	ALA	844	17.702	11.189	41.867	1.00	27.72
	ATOM	288	H	ALA	844	17.926	11.235	40.914	1.00	0.00
	ATOM	289	CA	ALA	844	17.866	9.949	42.657	1.00	28.07
25	ATOM	290	CB	ALA	844	17.908	8.698	41.674	1.00	28.68
	ATOM	291	C	ALA	844	19.114	9.933	43.525	1.00	25.24
	ATOM	292	O	ALA	844	19.129	9.465	44.654	1.00	24.49
	ATOM	293	N	PHE	845	20.213	10.361	42.901	1.00	23.00
	ATOM	294	H	PHE	845	19.977	10.695	42.034	1.00	0.00
30	ATOM	295	CA	PHE	845	21.549	10.395	43.502	1.00	21.41
	ATOM	296	CB	PHE	845	22.553	9.751	42.608	1.00	23.99
	ATOM	297	CG	PHE	845	22.144	8.405	42.259	1.00	28.00
	ATOM	298	CD1	PHE	845	22.225	8.052	40.904	1.00	31.51
	ATOM	299	CD2	PHE	845	21.674	7.496	43.225	1.00	32.46
35	ATOM	300	CE1	PHE	845	21.831	6.774	40.496	1.00	33.90
	ATOM	301	CE2	PHE	845	21.270	6.211	42.828	1.00	35.93
	ATOM	302	CZ	PHE	845	21.358	5.865	41.460	1.00	35.86
	ATOM	303	C	PHE	845	22.050	11.771	43.765	1.00	22.16
	ATOM	304	O	PHE	845	22.978	11.953	44.551	1.00	21.25
40	ATOM	305	N	GLY	846	21.536	12.769	43.078	1.00	20.31
	ATOM	306	H	GLY	846	20.741	12.647	42.526	1.00	0.00
	ATOM	307	CA	GLY	846	22.054	14.132	43.349	1.00	19.91
	ATOM	308	C	GLY	846	21.023	15.171	43.680	1.00	19.36
	ATOM	309	O	GLY	846	19.800	14.939	43.643	1.00	16.85
45	ATOM	310	N	GLN	847	21.515	16.365	43.966	1.00	17.97
	ATOM	311	H	GLN	847	22.481	16.515	43.999	1.00	0.00
	ATOM	312	CA	GLN	847	20.546	17.450	44.269	1.00	20.57
	ATOM	313	CB	GLN	847	19.851	17.361	45.710	1.00	18.83
	ATOM	314	CG	GLN	847	20.946	17.506	46.745	1.00	21.69
50	ATOM	315	CD	GLN	847	20.521	16.947	48.046	1.00	24.41
	ATOM	316	OE1	GLN	847	19.431	17.166	48.568	1.00	26.58
	ATOM	317	NE2	GLN	847	21.395	16.194	48.652	1.00	23.60
	ATOM	318	HE21	GLN	847	22.277	16.006	48.282	1.00	0.00
	ATOM	319	HE22	GLN	847	21.089	15.844	49.507	1.00	0.00
55	ATOM	320	C	GLN	847	21.245	18.794	44.210	1.00	20.00
	ATOM	321	O	GLN	847	22.477	18.894	44.303	1.00	17.70
	ATOM	322	N	VAL	848	20.412	19.785	43.885	1.00	19.47
	ATOM	323	H	VAL	848	19.501	19.539	43.620	1.00	0.00
	ATOM	324	CA	VAL	848	20.879	21.172	43.850	1.00	18.33
60	ATOM	325	CB	VAL	848	20.626	21.903	42.454	1.00	19.29
	ATOM	326	CG1	VAL	848	21.007	23.442	42.572	1.00	20.20
	ATOM	327	CG2	VAL	848	21.544	21.325	41.350	1.00	15.24

	ATOM	328	C	VAL	848	20.082	21.869	44.968	1.00	17.07
	ATOM	329	O	VAL	848	18.861	21.713	45.186	1.00	15.78
	ATOM	330	N	ILE	849	20.837	22.490	45.850	1.00	18.39
	ATOM	331	H	ILE	849	21.816	22.439	45.791	1.00	0.00
5	ATOM	332	CA	ILE	849	20.152	23.202	46.928	1.00	18.87
	ATOM	333	CB	ILE	849	20.264	22.393	48.292	1.00	20.66
	ATOM	334	CG2	ILE	849	20.223	20.860	48.095	1.00	21.68
	ATOM	335	CG1	ILE	849	21.522	22.618	48.964	1.00	20.73
	ATOM	336	CD1	ILE	849	20.653	22.978	50.170	1.00	24.32
10	ATOM	337	C	ILE	849	20.635	24.598	47.093	1.00	18.34
	ATOM	338	O	ILE	849	21.805	24.921	46.803	1.00	17.01
	ATOM	339	N	GLU	850	19.680	25.472	47.379	1.00	19.23
	ATOM	340	H	GLU	850	18.767	25.130	47.459	1.00	0.00
	ATOM	341	CA	GLU	850	19.958	26.923	47.654	1.00	21.58
15	ATOM	342	CB	GLU	850	18.687	27.635	47.878	1.00	25.30
	ATOM	343	CG	GLU	850	18.771	29.138	47.671	1.00	29.23
	ATOM	344	CD	GLU	850	17.316	29.742	47.723	1.00	32.86
	ATOM	345	OE1	GLU	850	16.262	29.084	47.870	1.00	32.48
	ATOM	346	OE2	GLU	850	17.262	30.959	47.612	1.00	38.35
20	ATOM	347	C	GLU	850	20.796	27.084	48.940	1.00	21.55
	ATOM	348	O	GLU	850	20.578	26.394	49.940	1.00	21.67
	ATOM	349	N	ALA	851	21.737	28.026	48.944	1.00	20.99
	ATOM	350	H	ALA	851	21.874	28.560	48.128	1.00	0.00
	ATOM	351	CA	ALA	851	22.652	28.229	50.079	1.00	18.44
25	ATOM	352	CB	ALA	851	23.841	27.291	49.971	1.00	12.74
	ATOM	353	C	ALA	851	23.208	29.593	50.138	1.00	16.98
	ATOM	354	O	ALA	851	23.186	30.289	49.147	1.00	17.28
	ATOM	355	N	ASP	852	23.718	29.998	51.274	1.00	16.74
	ATOM	356	H	ASP	852	23.685	29.383	52.032	1.00	0.00
30	ATOM	357	CA	ASP	852	24.335	31.318	51.419	1.00	18.62
	ATOM	358	CB	ASP	852	23.737	32.101	52.552	1.00	23.28
	ATOM	359	CG	ASP	852	22.366	32.664	52.137	1.00	29.37
	ATOM	360	OD1	ASP	852	21.605	32.930	53.069	1.00	32.54
	ATOM	361	OD2	ASP	852	22.054	32.865	50.947	1.00	30.95
35	ATOM	362	C	ASP	852	25.771	31.203	51.688	1.00	16.79
	ATOM	363	O	ASP	852	26.164	30.522	52.619	1.00	18.69
	ATOM	364	N	ALA	853	26.568	31.799	50.846	1.00	18.01
	ATOM	365	H	ALA	853	26.141	32.254	50.095	1.00	0.00
	ATOM	366	CA	ALA	853	28.020	31.719	50.925	1.00	17.93
40	ATOM	367	CB	ALA	853	28.586	31.268	49.558	1.00	15.00
	ATOM	368	C	ALA	853	28.583	33.073	51.296	1.00	18.87
	ATOM	369	O	ALA	853	28.260	34.086	50.666	1.00	21.14
	ATOM	370	N	PHE	854	29.347	33.097	52.366	1.00	20.21
	ATOM	371	H	PHE	854	29.505	32.247	52.839	1.00	0.00
45	ATOM	372	CA	PHE	854	29.964	34.333	52.857	1.00	23.26
	ATOM	373	CB	PHE	854	30.157	34.244	54.432	1.00	23.23
	ATOM	374	CG	PHE	854	30.752	35.487	55.069	1.00	22.08
	ATOM	375	CD1	PHE	854	32.145	35.632	55.302	1.00	22.82
	ATOM	376	CD2	PHE	854	29.882	36.516	55.467	1.00	21.58
50	ATOM	377	CE1	PHE	854	32.666	36.781	55.929	1.00	21.72
	ATOM	378	CE2	PHE	854	30.399	37.656	56.093	1.00	21.70
	ATOM	379	CZ	PHE	854	31.769	37.790	56.317	1.00	19.75
	ATOM	380	C	PHE	854	31.307	34.624	52.156	1.00	21.77
	ATOM	381	O	PHE	854	32.301	33.942	52.381	1.00	25.59
55	ATOM	382	N	GLY	855	31.341	35.619	51.294	1.00	19.83
	ATOM	383	H	GLY	855	30.488	36.051	51.160	1.00	0.00
	ATOM	384	CA	GLY	855	32.547	36.005	50.616	1.00	19.31
	ATOM	385	C	GLY	855	32.936	35.027	49.576	1.00	20.01
	ATOM	386	O	GLY	855	34.124	34.846	49.379	1.00	23.08
60	ATOM	387	N	ILE	856	32.031	34.347	48.894	1.00	19.76
	ATOM	388	H	ILE	856	31.085	34.403	49.111	1.00	0.00
	ATOM	389	CA	ILE	856	32.583	33.413	47.879	1.00	20.71

	ATOM	390	CB	ILE	856	31.454	32.339	47.436	1.00	18.43
	ATOM	391	CG2	ILE	856	30.343	32.921	46.571	1.00	17.16
	ATOM	392	CG1	ILE	856	32.202	31.214	46.705	1.00	17.68
	ATOM	393	CD1	ILE	856	31.518	29.879	46.877	1.00	18.55
5	ATOM	394	C	ILE	856	33.144	34.215	46.680	1.00	23.23
	ATOM	395	O	ILE	856	34.127	33.845	46.038	1.00	23.54
	ATOM	396	N	ASP	857	32.542	35.332	46.329	1.00	24.71
	ATOM	397	H	ASP	857	31.753	35.596	46.837	1.00	0.00
	ATOM	398	CA	ASP	857	33.108	36.070	45.218	1.00	30.35
10	ATOM	399	CB	ASP	857	32.132	36.039	44.039	1.00	33.66
	ATOM	1	CG	ASP	857	30.709	36.547	44.390	1.00	40.65
	ATOM	401	OD1	ASP	857	30.485	37.237	45.398	1.00	40.52
	ATOM	402	OD2	ASP	857	29.806	36.245	43.595	1.00	45.26
	ATOM	403	C	ASP	857	33.429	37.505	45.667	1.00	34.14
15	ATOM	404	O	ASP	857	34.470	38.003	45.201	1.00	37.20
	ATOM	405	N	LYS	858	32.640	38.231	46.529	1.00	32.74
	ATOM	406	H	LYS	858	31.927	37.770	47.016	1.00	0.00
	ATOM	407	CA	LYS	858	33.156	39.601	46.916	1.00	33.37
	ATOM	408	CB	LYS	858	32.174	40.846	46.788	1.00	32.21
20	ATOM	409	C	LYS	858	33.532	39.475	48.361	1.00	31.38
	ATOM	410	O	LYS	858	32.805	38.902	49.188	1.00	31.73
	ATOM	411	N	THR	859	34.684	40.005	48.686	1.00	27.89
	ATOM	412	H	THR	859	35.160	40.586	48.066	1.00	0.00
	ATOM	413	CA	THR	859	35.114	39.768	50.058	1.00	28.65
25	ATOM	414	CB	THR	859	36.504	40.447	50.339	1.00	30.47
	ATOM	415	OG1	THR	859	37.407	40.084	49.302	1.00	32.16
	ATOM	416	HG1	THR	859	38.260	40.492	49.474	1.00	0.00
	ATOM	417	CG2	THR	859	37.120	40.016	51.722	1.00	28.53
	ATOM	418	C	THR	859	34.126	40.188	51.139	1.00	25.75
30	ATOM	419	O	THR	859	33.443	41.199	51.042	1.00	25.26
	ATOM	420	N	ALA	860	34.034	39.309	52.141	1.00	24.60
	ATOM	421	H	ALA	860	34.440	38.446	51.913	1.00	0.00
	ATOM	422	CA	ALA	860	33.179	39.427	53.322	1.00	21.80
	ATOM	423	CB	ALA	860	33.810	40.491	54.254	1.00	19.69
35	ATOM	424	C	ALA	860	31.708	39.759	52.973	1.00	21.64
	ATOM	425	O	ALA	860	30.981	40.387	53.717	1.00	21.05
	ATOM	426	N	THR	861	31.174	39.374	51.816	1.00	22.92
	ATOM	427	H	THR	861	31.753	39.004	51.117	1.00	0.00
	ATOM	428	CA	THR	861	29.725	39.645	51.543	1.00	23.38
40	ATOM	429	CB	THR	861	29.475	40.690	50.363	1.00	25.50
	ATOM	430	OG1	THR	861	28.458	40.282	49.431	1.00	28.59
	ATOM	431	HG1	THR	861	28.170	41.038	48.910	1.00	0.00
	ATOM	432	CG2	THR	861	30.771	40.931	49.657	1.00	24.79
	ATOM	433	C	THR	861	29.008	38.360	51.259	1.00	21.82
45	ATOM	434	O	THR	861	29.540	37.465	50.606	1.00	21.00
	ATOM	435	N	CYS	862	27.946	38.148	52.010	1.00	21.09
	ATOM	436	H	CYS	862	27.715	38.898	52.604	1.00	0.00
	ATOM	437	CA	CYS	862	27.131	36.922	51.848	1.00	25.52
	ATOM	438	CB	CYS	862	25.840	36.775	52.758	1.00	24.20
50	ATOM	439	SG	CYS	862	25.596	35.108	53.423	1.00	33.71
	ATOM	440	C	CYS	862	26.593	36.981	50.424	1.00	26.68
	ATOM	441	O	CYS	862	26.207	38.068	49.954	1.00	26.42
	ATOM	442	N	ARG	863	26.462	35.814	49.779	1.00	25.04
	ATOM	443	H	ARG	863	26.680	34.993	50.257	1.00	0.00
55	ATOM	444	CA	ARG	863	25.989	35.714	48.383	1.00	22.97
	ATOM	445	CB	ARG	863	27.325	35.814	47.618	1.00	27.95
	ATOM	446	CG	ARG	863	27.670	35.112	46.303	1.00	33.24
	ATOM	447	CD	ARG	863	26.567	35.291	45.289	1.00	33.37
	ATOM	448	NE	ARG	863	27.198	35.372	43.947	1.00	37.98
60	ATOM	449	HE	ARG	863	28.014	35.871	43.906	1.00	0.00
	ATOM	450	CZ	ARG	863	26.636	34.923	42.798	1.00	39.52
	ATOM	451	NH1	ARG	863	27.399	35.132	41.719	1.00	37.87

	ATOM	452	HH11	ARG	863	28.290	35.580	41.816	1.00	0.00
	ATOM	453	HH12	ARG	863	27.068	34.851	40.821	1.00	0.00
	ATOM	454	NH2	ARG	863	25.426	34.252	42.733	1.00	35.98
	ATOM	455	HH21	ARG	863	24.911	34.065	43.562	1.00	0.00
5	ATOM	456	HH22	ARG	863	25.066	33.951	41.856	1.00	0.00
	ATOM	457	C	ARG	863	25.196	34.445	48.257	1.00	21.11
	ATOM	458	O	ARG	863	25.636	33.407	48.740	1.00	19.89
	ATOM	459	N	THR	864	23.929	34.538	47.877	1.00	19.22
	ATOM	460	H	THR	864	23.577	35.440	47.791	1.00	0.00
10	ATOM	461	CA	THR	864	23.104	33.319	47.749	1.00	18.46
	ATOM	462	CB	THR	864	21.624	33.559	47.417	1.00	18.89
	ATOM	463	OG1	THR	864	21.248	34.467	48.415	1.00	22.68
	ATOM	464	HG1	THR	864	20.286	34.565	48.392	1.00	0.00
	ATOM	465	CG2	THR	864	20.641	32.375	47.503	1.00	13.50
15	ATOM	466	C	THR	864	23.636	32.592	46.616	1.00	16.84
	ATOM	467	O	THR	864	23.822	33.203	45.583	1.00	18.24
	ATOM	468	N	VAL	865	23.881	31.335	46.752	1.00	16.27
	ATOM	469	H	VAL	865	23.764	30.931	47.614	1.00	0.00
	ATOM	470	CA	VAL	865	24.412	30.496	45.656	1.00	14.82
20	ATOM	471	CB	VAL	865	25.877	30.113	45.888	1.00	12.89
	ATOM	472	CG1	VAL	865	26.704	31.365	45.771	1.00	10.92
	ATOM	473	CG2	VAL	865	25.998	29.257	47.164	1.00	13.94
	ATOM	474	C	VAL	865	23.626	29.179	45.527	1.00	14.86
	ATOM	475	O	VAL	865	22.733	28.940	46.371	1.00	14.29
25	ATOM	476	N	ALA	866	23.822	28.435	44.404	1.00	12.75
	ATOM	477	H	ALA	866	24.470	28.763	43.735	1.00	0.00
	ATOM	478	CA	ALA	866	23.179	27.100	44.203	1.00	12.65
	ATOM	479	CB	ALA	866	22.515	26.865	42.839	1.00	12.24
	ATOM	480	C	ALA	866	24.318	26.105	44.244	1.00	12.26
30	ATOM	481	O	ALA	866	25.412	26.342	43.728	1.00	12.83
	ATOM	482	N	VAL	867	24.141	25.032	45.016	1.00	16.67
	ATOM	483	H	VAL	867	23.338	25.016	45.573	1.00	0.00
	ATOM	484	CA	VAL	867	25.162	23.946	45.164	1.00	16.29
	ATOM	485	CB	VAL	867	25.922	23.996	46.629	1.00	17.94
35	ATOM	486	CG1	VAL	867	25.377	25.177	47.440	1.00	16.71
	ATOM	487	CG2	VAL	867	25.966	22.627	47.306	1.00	12.67
	ATOM	488	C	VAL	867	24.671	22.531	44.866	1.00	15.37
	ATOM	489	O	VAL	867	23.623	22.048	45.295	1.00	13.02
	ATOM	490	N	LYS	868	25.393	21.963	43.884	1.00	14.85
40	ATOM	491	H	LYS	868	26.099	22.495	43.472	1.00	0.00
	ATOM	492	CA	LYS	868	25.109	20.599	43.458	1.00	13.90
	ATOM	493	CB	LYS	868	25.436	20.417	41.941	1.00	13.63
	ATOM	494	CG	LYS	868	24.976	19.030	41.484	1.00	12.67
	ATOM	495	CD	LYS	868	25.184	18.782	39.992	1.00	16.68
45	ATOM	496	CE	LYS	868	24.168	19.457	39.059	1.00	15.81
	ATOM	497	NZ	LYS	868	24.490	19.225	37.661	1.00	13.96
	ATOM	498	HZ1	LYS	868	24.862	18.263	37.533	1.00	0.00
	ATOM	499	HZ2	LYS	868	25.231	19.903	37.387	1.00	0.00
	ATOM	500	HZ3	LYS	868	23.639	19.364	37.080	1.00	0.00
50	ATOM	501	C	LYS	868	25.960	19.633	44.335	1.00	13.89
	ATOM	502	O	LYS	868	27.167	19.743	44.574	1.00	13.37
	ATOM	503	N	MET	869	25.298	18.624	44.863	1.00	14.18
	ATOM	504	H	MET	869	24.333	18.572	44.704	1.00	0.00
	ATOM	505	CA	MET	869	25.967	17.638	45.683	1.00	12.99
55	ATOM	506	CB	MET	869	26.042	18.150	47.128	1.00	15.09
	ATOM	507	CG	MET	869	24.635	18.450	47.700	1.00	21.92
	ATOM	508	SD	MET	869	24.680	19.484	49.204	1.00	28.23
	ATOM	509	CE	MET	869	25.553	18.169	50.135	1.00	30.94
	ATOM	510	C	MET	869	25.188	16.362	45.606	1.00	12.87
60	ATOM	511	O	MET	869	24.090	16.305	45.058	1.00	9.95
	ATOM	512	N	LEU	870	25.846	15.295	46.052	1.00	14.34
	ATOM	513	H	LEU	870	26.802	15.455	46.196	1.00	0.00

	ATOM	514	CA	LEU	870	25.210	13.972	46.054	1.00	15.43
	ATOM	515	CB	LEU	870	26.306	12.826	46.023	1.00	12.70
	ATOM	516	CG	LEU	870	27.237	12.881	44.725	1.00	12.04
	ATOM	517	CD1	LEU	870	28.140	11.685	44.629	1.00	11.74
5	ATOM	518	CD2	LEU	870	26.355	12.896	43.462	1.00	14.31
	ATOM	519	C	LEU	870	24.233	13.743	47.195	1.00	17.48
	ATOM	520	O	LEU	870	24.181	14.445	48.206	1.00	18.40
	ATOM	521	N	LYS	871	23.439	12.738	47.008	1.00	19.50
	ATOM	522	H	LYS	871	23.622	12.169	46.240	1.00	0.00
10	ATOM	523	CA	LYS	871	22.405	12.293	47.935	1.00	25.00
	ATOM	524	CB	LYS	871	21.027	12.294	47.208	1.00	25.95
	ATOM	525	CG	LYS	871	20.377	13.652	47.241	1.00	30.09
	ATOM	526	CD	LYS	871	19.213	13.683	46.252	1.00	34.75
	ATOM	527	CE	LYS	871	17.907	13.068	46.806	1.00	37.77
15	ATOM	528	NZ	LYS	871	17.956	11.612	46.687	1.00	40.86
	ATOM	529	HZ1	LYS	871	18.875	11.275	47.041	1.00	0.00
	ATOM	530	HZ2	LYS	871	17.875	11.357	45.680	1.00	0.00
	ATOM	531	HZ3	LYS	871	17.192	11.171	47.236	1.00	0.00
	ATOM	532	C	LYS	871	22.656	10.887	48.441	1.00	23.28
20	ATOM	533	O	LYS	871	23.443	10.143	47.870	1.00	23.98
	ATOM	534	N	GLU	872	21.956	10.481	49.493	1.00	26.99
	ATOM	535	H	GLU	872	21.274	11.091	49.854	1.00	0.00
	ATOM	536	CA	GLU	872	22.021	9.095	50.057	1.00	28.92
	ATOM	537	CB	GLU	872	20.988	8.945	51.229	1.00	38.58
25	ATOM	538	CG	GLU	872	19.993	7.713	51.323	1.00	51.19
	ATOM	539	CD	GLU	872	20.612	6.378	51.895	1.00	60.10
	ATOM	540	OE1	GLU	872	19.872	5.361	51.821	1.00	61.87
	ATOM	541	OE2	GLU	872	21.785	6.366	52.399	1.00	62.32
	ATOM	542	C	GLU	872	21.640	8.170	48.915	1.00	25.21
30	ATOM	543	O	GLU	872	20.628	8.378	48.235	1.00	24.50
	ATOM	544	N	GLY	873	22.464	7.179	48.644	1.00	23.05
	ATOM	545	H	GLY	873	23.247	6.967	49.198	1.00	0.00
	ATOM	546	CA	GLY	873	22.113	6.317	47.529	1.00	21.78
	ATOM	547	C	GLY	873	23.072	6.433	46.392	1.00	22.04
35	ATOM	548	O	GLY	873	23.187	5.544	45.556	1.00	19.52
	ATOM	549	N	ALA	874	23.729	7.589	46.298	1.00	21.91
	ATOM	550	H	ALA	874	23.505	8.338	46.890	1.00	0.00
	ATOM	551	CA	ALA	874	24.690	7.725	45.204	1.00	20.44
	ATOM	552	CB	ALA	874	25.234	9.133	45.041	1.00	21.31
40	ATOM	553	C	ALA	874	25.857	6.884	45.592	1.00	18.54
	ATOM	554	O	ALA	874	26.098	6.600	46.763	1.00	17.52
	ATOM	555	N	THR	875	26.696	6.604	44.635	1.00	19.07
	ATOM	556	H	THR	875	26.521	7.009	43.769	1.00	0.00
	ATOM	557	CA	THR	875	27.884	5.778	44.878	1.00	17.43
45	ATOM	558	CB	THR	875	27.842	4.440	44.037	1.00	19.39
	ATOM	559	OG1	THR	875	27.927	4.797	42.666	1.00	16.99
	ATOM	560	HG1	THR	875	27.856	3.965	42.165	1.00	0.00
	ATOM	561	CG2	THR	875	26.558	3.609	44.137	1.00	19.24
	ATOM	562	C	THR	875	29.135	6.589	44.429	1.00	18.29
50	ATOM	563	O	THR	875	29.053	7.664	43.876	1.00	17.02
	ATOM	564	N	HIS	876	30.373	6.096	44.622	1.00	20.06
	ATOM	565	H	HIS	876	30.528	5.427	45.333	1.00	0.00
	ATOM	566	CA	HIS	876	31.548	6.794	44.177	1.00	19.20
	ATOM	567	C	HIS	876	31.533	7.069	42.681	1.00	18.07
55	ATOM	568	O	HIS	876	32.203	8.003	42.234	1.00	23.03
	ATOM	569	CB	HIS	876	32.750	5.963	44.499	1.00	14.17
	ATOM	570	CG	HIS	876	33.890	6.762	44.164	1.00	14.57
	ATOM	571	ND1	HIS	876	34.290	7.844	44.866	1.00	14.41
	ATOM	572	HD1	HIS	876	33.888	8.205	45.686	1.00	0.00
60	ATOM	573	CD2	HIS	876	34.872	6.446	43.226	1.00	18.31
	ATOM	574	NE2	HIS	876	35.878	7.361	43.401	1.00	19.64
	ATOM	575	CE1	HIS	876	35.521	8.225	44.406	1.00	13.24



	ATOM	576	N	SER	877	30.830	6.319	41.851	1.00	15.60
	ATOM	577	H	SER	877	30.278	5.622	42.245	1.00	0.00
	ATOM	578	CA	SER	877	30.807	6.618	40.435	1.00	14.53
	ATOM	579	CB	SER	877	30.242	5.398	39.651	1.00	19.06
5	ATOM	580	OG	SER	877	28.905	5.029	39.882	1.00	30.21
	ATOM	581	HG	SER	877	28.556	4.817	39.014	1.00	0.00
	ATOM	582	C	SER	877	30.078	7.910	40.131	1.00	12.84
	ATOM	583	O	SER	877	30.475	8.664	39.255	1.00	12.98
	ATOM	584	N	GLU	878	29.063	8.256	40.916	1.00	13.37
10	ATOM	585	H	GLU	878	28.758	7.578	41.555	1.00	0.00
	ATOM	586	CA	GLU	878	28.340	9.536	40.832	1.00	14.05
	ATOM	587	CB	GLU	878	27.146	9.513	41.684	1.00	15.63
	ATOM	588	CG	GLU	878	25.968	8.911	40.918	1.00	19.49
	ATOM	589	CD	GLU	878	25.981	7.382	40.893	1.00	23.08
15	ATOM	590	OE1	GLU	878	26.364	6.726	41.834	1.00	25.19
	ATOM	591	OE2	GLU	878	25.518	6.808	39.940	1.00	29.90
	ATOM	592	C	GLU	878	29.278	10.612	41.344	1.00	14.66
	ATOM	593	O	GLU	878	29.333	11.733	40.855	1.00	17.36
	ATOM	594	N	HIS	879	30.091	10.280	42.296	1.00	14.55
20	ATOM	595	H	HIS	879	29.973	9.380	42.670	1.00	0.00
	ATOM	596	CA	HIS	879	31.115	11.165	42.843	1.00	13.21
	ATOM	597	C	HIS	879	32.147	11.490	41.781	1.00	15.27
	ATOM	598	O	HIS	879	32.606	12.637	41.630	1.00	12.98
	ATOM	599	CB	HIS	879	31.746	10.449	44.042	1.00	10.76
25	ATOM	600	CG	HIS	879	32.610	11.366	44.726	1.00	7.90
	ATOM	601	ND1	HIS	879	33.898	11.530	44.410	1.00	12.19
	ATOM	602	HD1	HIS	879	34.367	11.123	43.650	1.00	0.00
	ATOM	603	CD2	HIS	879	32.296	12.166	45.813	1.00	9.79
	ATOM	604	NE2	HIS	879	33.447	12.800	46.113	1.00	10.19
30	ATOM	605	CE1	HIS	879	34.451	12.412	45.260	1.00	7.48
	ATOM	606	N	ARG	880	32.587	10.482	41.027	1.00	17.24
	ATOM	607	H	ARG	880	32.304	9.576	41.231	1.00	0.00
	ATOM	608	CA	ARG	880	33.552	10.730	39.938	1.00	16.14
	ATOM	609	CB	ARG	880	33.991	9.412	39.255	1.00	17.35
35	ATOM	610	CG	ARG	880	34.894	8.625	40.159	1.00	18.14
	ATOM	611	CD	ARG	880	35.507	7.363	39.474	1.00	22.20
	ATOM	612	NE	ARG	880	34.675	6.156	39.535	1.00	28.41
	ATOM	613	HE	ARG	880	33.769	6.190	39.161	1.00	0.00
	ATOM	614	CZ	ARG	880	35.051	4.967	40.064	1.00	28.73
40	ATOM	615	NH1	ARG	880	34.169	3.994	39.990	1.00	32.49
	ATOM	616	HH11	ARG	880	33.274	4.126	39.565	1.00	0.00
	ATOM	617	HH12	ARG	880	34.420	3.104	40.371	1.00	0.00
	ATOM	618	NH2	ARG	880	36.180	4.685	40.721	1.00	28.04
	ATOM	619	HH21	ARG	880	36.857	5.406	40.861	1.00	0.00
45	ATOM	620	HH22	ARG	880	36.354	3.767	41.075	1.00	0.00
	ATOM	621	C	ARG	880	32.874	11.647	38.889	1.00	17.11
	ATOM	622	O	ARG	880	33.459	12.631	38.400	1.00	14.72
	ATOM	623	N	ALA	881	31.609	11.376	38.531	1.00	13.92
	ATOM	624	H	ALA	881	31.183	10.585	38.930	1.00	0.00
50	ATOM	625	CA	ALA	881	30.927	12.232	37.589	1.00	11.19
	ATOM	626	CB	ALA	881	29.621	11.591	37.413	1.00	10.97
	ATOM	627	C	ALA	881	30.796	13.678	38.093	1.00	13.33
	ATOM	628	O	ALA	881	30.876	14.624	37.323	1.00	13.90
	ATOM	629	N	LEU	882	30.529	13.964	39.362	1.00	11.35
55	ATOM	630	H	LEU	882	30.313	13.222	39.962	1.00	0.00
	ATOM	631	CA	LEU	882	30.415	15.326	39.851	1.00	12.11
	ATOM	632	CB	LEU	882	29.901	15.295	41.329	1.00	9.97
	ATOM	633	CG	LEU	882	29.510	16.687	41.961	1.00	9.36
	ATOM	634	CD1	LEU	882	28.591	17.504	41.031	1.00	8.20
60	ATOM	635	CD2	LEU	882	28.799	16.459	43.273	1.00	11.07
	ATOM	636	C	LEU	882	31.751	16.072	39.762	1.00	16.41
	ATOM	637	O	LEU	882	31.887	17.271	39.448	1.00	18.07

	ATOM	638	N	MET	883	32.794	15.349	40.147	1.00	18.28
	ATOM	639	H	MET	883	32.621	14.475	40.551	1.00	0.00
	ATOM	640	CA	MET	883	34.178	15.858	40.115	1.00	18.40
	ATOM	641	CB	MET	883	35.187	14.751	40.713	1.00	19.62
5	ATOM	642	CG	MET	883	36.591	15.198	41.010	1.00	19.11
	ATOM	643	SD	MET	883	36.840	16.792	41.953	1.00	24.05
	ATOM	644	CE	MET	883	36.551	16.061	43.566	1.00	19.82
	ATOM	645	C	MET	883	34.527	16.176	38.659	1.00	18.16
	ATOM	646	O	MET	883	35.172	17.188	38.409	1.00	19.68
10	ATOM	647	N	SER	884	34.153	15.358	37.653	1.00	17.17
	ATOM	648	H	SER	884	33.665	14.540	37.867	1.00	0.00
	ATOM	649	CA	SER	884	34.508	15.717	36.260	1.00	16.94
	ATOM	650	CB	SER	884	34.488	14.379	35.447	1.00	17.12
	ATOM	651	OG	SER	884	33.315	14.277	34.678	1.00	27.57
15	ATOM	652	HG	SER	884	33.297	13.390	34.273	1.00	0.00
	ATOM	653	C	SER	884	33.546	16.893	35.797	1.00	17.09
	ATOM	654	O	SER	884	33.918	17.784	35.020	1.00	16.43
	ATOM	655	N	GLU	885	32.331	17.020	36.322	1.00	14.31
	ATOM	656	H	GLU	885	31.952	16.289	36.862	1.00	0.00
20	ATOM	657	CA	GLU	885	31.523	18.210	36.022	1.00	12.43
	ATOM	658	CB	GLU	885	30.232	17.947	36.691	1.00	12.09
	ATOM	659	CG	GLU	885	29.550	19.249	37.182	1.00	16.28
	ATOM	660	CD	GLU	885	28.057	19.168	37.371	1.00	13.48
	ATOM	661	OE1	GLU	885	27.514	18.076	37.528	1.00	19.58
25	ATOM	662	OE2	GLU	885	27.449	20.225	37.397	1.00	13.64
	ATOM	663	C	GLU	885	32.257	19.510	36.542	1.00	12.74
	ATOM	664	O	GLU	885	32.245	20.583	35.932	1.00	12.81
	ATOM	665	N	LEU	886	32.871	19.478	37.730	1.00	11.80
	ATOM	666	H	LEU	886	32.748	18.668	38.271	1.00	0.00
30	ATOM	667	CA	LEU	886	33.636	20.627	38.303	1.00	10.76
	ATOM	668	CB	LEU	886	34.110	20.251	39.730	1.00	9.62
	ATOM	669	CG	LEU	886	35.160	21.085	40.483	1.00	10.05
	ATOM	670	CD1	LEU	886	34.612	22.520	40.715	1.00	10.91
	ATOM	671	CD2	LEU	886	35.494	20.454	41.841	1.00	5.66
35	ATOM	672	C	LEU	886	34.808	20.928	37.410	1.00	13.25
	ATOM	673	O	LEU	886	35.092	22.065	37.057	1.00	16.79
	ATOM	674	N	LYS	887	35.576	19.924	36.993	1.00	16.94
	ATOM	675	H	LYS	887	35.372	19.033	37.346	1.00	0.00
	ATOM	676	CA	LYS	887	36.716	20.114	36.065	1.00	17.29
40	ATOM	677	CB	LYS	887	37.357	18.763	35.866	1.00	13.73
	ATOM	678	CG	LYS	887	38.421	18.653	37.002	1.00	18.10
	ATOM	679	CD	LYS	887	38.786	17.181	36.948	1.00	19.11
	ATOM	680	CE	LYS	887	39.817	16.685	37.967	1.00	22.23
	ATOM	681	NZ	LYS	887	39.716	15.197	38.052	1.00	23.53
45	ATOM	682	HZ1	LYS	887	39.789	14.820	37.086	1.00	0.00
	ATOM	683	HZ2	LYS	887	38.797	14.926	38.458	1.00	0.00
	ATOM	684	HZ3	LYS	887	40.483	14.813	38.641	1.00	0.00
	ATOM	685	C	LYS	887	36.254	20.758	34.714	1.00	17.55
	ATOM	686	O	LYS	887	36.866	21.700	34.214	1.00	17.48
50	ATOM	687	N	ILE	888	35.163	20.282	34.114	1.00	19.97
	ATOM	688	H	ILE	888	34.720	19.509	34.521	1.00	0.00
	ATOM	689	CA	ILE	888	34.605	20.838	32.855	1.00	19.61
	ATOM	690	CB	ILE	888	33.380	19.936	32.296	1.00	20.86
	ATOM	691	CG2	ILE	888	31.961	20.371	32.608	1.00	18.37
55	ATOM	692	CG1	ILE	888	33.390	20.146	30.780	1.00	24.39
	ATOM	693	CD1	ILE	888	34.803	19.908	30.152	1.00	29.55
	ATOM	694	C	ILE	888	34.170	22.289	33.108	1.00	17.75
	ATOM	695	O	ILE	888	34.492	23.190	32.353	1.00	18.97
	ATOM	696	N	LEU	889	33.454	22.603	34.159	1.00	17.53
60	ATOM	697	H	LEU	889	33.129	21.873	34.728	1.00	0.00
	ATOM	698	CA	LEU	889	33.103	24.013	34.448	1.00	16.94
	ATOM	699	CB	LEU	889	32.214	24.097	35.730	1.00	18.05

	ATOM	700	CG	LEU	889	30.823	23.454	35.543	1.00	15.04
	ATOM	701	CD1	LEU	889	30.034	23.587	36.878	1.00	11.53
	ATOM	702	CD2	LEU	889	30.075	24.158	34.392	1.00	14.80
	ATOM	703	C	LEU	889	34.369	24.899	34.619	1.00	16.52
5	ATOM	704	O	LEU	889	34.359	26.072	34.282	1.00	16.48
	ATOM	705	N	ILE	890	35.463	24.404	35.215	1.00	15.84
	ATOM	706	H	ILE	890	35.413	23.513	35.616	1.00	0.00
	ATOM	707	CA	ILE	890	36.683	25.198	35.344	1.00	14.19
	ATOM	708	CB	ILE	890	37.671	24.447	36.180	1.00	15.23
10	ATOM	709	CG2	ILE	890	39.053	25.168	36.045	1.00	12.95
	ATOM	710	CG1	ILE	890	37.155	24.348	37.634	1.00	10.26
	ATOM	711	CD1	ILE	890	38.026	23.458	38.549	1.00	9.98
	ATOM	712	C	ILE	890	37.209	25.385	33.931	1.00	17.35
	ATOM	713	O	ILE	890	37.602	26.472	33.516	1.00	20.68
15	ATOM	714	N	HIS	891	37.164	24.341	33.106	1.00	15.37
	ATOM	715	H	HIS	891	36.842	23.484	33.448	1.00	0.00
	ATOM	716	CA	HIS	891	37.659	24.441	31.732	1.00	16.46
	ATOM	717	C	HIS	891	36.859	25.425	30.863	1.00	16.66
	ATOM	718	O	HIS	891	37.410	26.195	30.123	1.00	19.13
20	ATOM	719	CB	HIS	891	37.676	22.979	31.146	1.00	15.04
	ATOM	720	CG	HIS	891	37.818	22.967	29.697	1.00	20.20
	ATOM	721	ND1	HIS	891	38.941	23.354	29.041	1.00	22.20
	ATOM	722	CE1	HIS	891	38.561	23.506	27.733	1.00	23.52
	ATOM	723	CD2	HIS	891	36.752	22.870	28.782	1.00	22.96
25	ATOM	724	NE2	HIS	891	37.247	23.233	27.587	1.00	25.26
	ATOM	725	HE2	HIS	891	36.777	23.226	26.723	1.00	0.00
	ATOM	726	N	ILE	892	35.552	25.352	30.846	1.00	15.69
	ATOM	727	H	ILE	892	35.186	24.637	31.403	1.00	0.00
	ATOM	728	CA	ILE	892	34.661	26.223	30.115	1.00	14.88
30	ATOM	729	CB	ILE	892	33.193	25.776	30.490	1.00	12.11
	ATOM	730	CG2	ILE	892	32.100	26.723	30.022	1.00	12.05
	ATOM	731	CG1	ILE	892	32.948	24.439	29.819	1.00	10.61
	ATOM	732	CD1	ILE	892	31.714	23.797	30.406	1.00	7.85
	ATOM	733	C	ILE	892	34.978	27.670	30.521	1.00	15.56
35	ATOM	734	O	ILE	892	35.290	28.481	29.664	1.00	15.24
	ATOM	735	N	GLY	893	35.088	28.014	31.805	1.00	16.08
	ATOM	736	H	GLY	893	35.047	27.305	32.480	1.00	0.00
	ATOM	737	CA	GLY	893	35.307	29.417	32.221	1.00	16.21
	ATOM	738	C	GLY	893	33.989	30.264	32.137	1.00	19.13
40	ATOM	739	O	GLY	893	32.873	29.830	31.835	1.00	17.08
	ATOM	740	N	HIS	894	34.030	31.557	32.430	1.00	19.53
	ATOM	741	H	HIS	894	34.887	31.900	32.761	1.00	0.00
	ATOM	742	CA	HIS	894	32.838	32.375	32.410	1.00	18.19
	ATOM	743	C	HIS	894	32.296	32.955	31.148	1.00	17.54
45	ATOM	744	O	HIS	894	32.988	33.435	30.247	1.00	18.08
	ATOM	745	CB	HIS	894	33.031	33.528	33.418	1.00	23.60
	ATOM	746	CG	HIS	894	34.368	34.226	33.342	1.00	30.85
	ATOM	747	ND1	HIS	894	35.442	33.961	34.160	1.00	33.58
	ATOM	748	CE1	HIS	894	36.449	34.865	33.915	1.00	32.32
50	ATOM	749	CD2	HIS	894	34.777	35.341	32.560	1.00	34.72
	ATOM	750	NE2	HIS	894	36.040	35.728	32.903	1.00	35.30
	ATOM	751	HE2	HIS	894	36.665	36.286	32.380	1.00	0.00
	ATOM	752	N	HIS	895	30.995	33.079	31.155	1.00	15.30
	ATOM	753	H	HIS	895	30.499	32.572	31.845	1.00	0.00
55	ATOM	754	CA	HIS	895	30.286	33.719	30.067	1.00	11.37
	ATOM	755	C	HIS	895	29.001	34.185	30.644	1.00	11.32
	ATOM	756	O	HIS	895	28.423	33.515	31.484	1.00	12.30
	ATOM	757	CB	HIS	895	30.088	32.739	28.945	1.00	13.01
	ATOM	758	CG	HIS	895	29.383	33.418	27.817	1.00	14.49
60	ATOM	759	ND1	HIS	895	28.037	33.549	27.707	1.00	15.06
	ATOM	760	CE1	HIS	895	27.751	34.327	26.638	1.00	11.35
	ATOM	761	CD2	HIS	895	29.933	34.146	26.764	1.00	11.75

	ATOM	762	NE2	HIS	895	28.915	34.678	26.079	1.00	13.10
	ATOM	763	HE2	HIS	895	28.964	34.964	25.135	1.00	0.00
	ATOM	764	N	LEU	896	28.459	35.299	30.252	1.00	11.00
	ATOM	765	H	LEU	896	28.839	35.763	29.469	1.00	0.00
5	ATOM	766	CA	LEU	896	27.218	35.753	30.854	1.00	12.29
	ATOM	767	CB	LEU	896	26.678	36.990	30.129	1.00	13.43
	ATOM	768	CG	LEU	896	25.398	37.605	30.652	1.00	15.65
	ATOM	769	CD1	LEU	896	25.798	38.282	31.953	1.00	14.94
	ATOM	770	CD2	LEU	896	24.678	38.452	29.564	1.00	14.75
10	ATOM	771	C	LEU	896	26.142	34.702	30.758	1.00	14.99
	ATOM	772	O	LEU	896	25.265	34.526	31.619	1.00	14.38
	ATOM	773	N	ASN	897	26.134	34.038	29.620	1.00	14.77
	ATOM	774	H	ASN	897	26.809	34.230	28.944	1.00	0.00
	ATOM	775	CA	ASN	897	25.057	33.103	29.407	1.00	14.83
15	ATOM	776	CB	ASN	897	24.531	33.372	27.975	1.00	13.75
	ATOM	777	CG	ASN	897	23.935	34.750	27.799	1.00	11.29
	ATOM	778	OD1	ASN	897	24.419	35.465	26.959	1.00	10.51
	ATOM	779	ND2	ASN	897	22.921	35.217	28.499	1.00	8.71
	ATOM	780	HD21	ASN	897	22.484	34.674	29.188	1.00	0.00
20	ATOM	781	HD22	ASN	897	22.590	36.115	28.319	1.00	0.00
	ATOM	782	C	ASN	897	25.262	31.620	29.665	1.00	15.28
	ATOM	783	O	ASN	897	24.543	30.744	29.159	1.00	16.01
	ATOM	784	N	VAL	898	26.171	31.327	30.552	1.00	16.22
	ATOM	785	H	VAL	898	26.682	32.049	30.980	1.00	0.00
25	ATOM	786	CA	VAL	898	26.430	29.942	30.993	1.00	18.26
	ATOM	787	CB	VAL	898	27.849	29.460	30.529	1.00	19.85
	ATOM	788	CG1	VAL	898	28.088	28.057	31.067	1.00	24.00
	ATOM	789	CG2	VAL	898	27.924	29.169	29.003	1.00	17.42
	ATOM	790	C	VAL	898	26.387	30.090	32.510	1.00	18.62
30	ATOM	791	O	VAL	898	26.827	31.128	33.053	1.00	18.37
	ATOM	792	N	VAL	899	25.771	29.165	33.240	1.00	17.38
	ATOM	793	H	VAL	899	25.417	28.375	32.784	1.00	0.00
	ATOM	794	CA	VAL	899	25.757	29.312	34.718	1.00	15.88
	ATOM	795	CB	VAL	899	24.865	28.189	35.347	1.00	15.15
35	ATOM	796	CG1	VAL	899	25.589	26.876	35.413	1.00	12.87
	ATOM	797	CG2	VAL	899	24.431	28.642	36.721	1.00	10.37
	ATOM	798	C	VAL	899	27.236	29.270	35.152	1.00	18.14
	ATOM	799	O	VAL	899	28.048	28.379	34.827	1.00	15.91
	ATOM	800	N	ASN	900	27.644	30.277	35.935	1.00	18.23
40	ATOM	801	H	ASN	900	26.960	30.943	36.174	1.00	0.00
	ATOM	802	CA	ASN	900	29.091	30.303	36.287	1.00	18.43
	ATOM	803	CB	ASN	900	29.685	31.828	36.189	1.00	21.36
	ATOM	804	CG	ASN	900	29.605	32.286	34.654	1.00	25.39
	ATOM	805	OD1	ASN	900	30.084	31.676	33.674	1.00	23.69
45	ATOM	806	ND2	ASN	900	28.904	33.366	34.313	1.00	25.51
	ATOM	807	HD21	ASN	900	28.408	33.957	34.907	1.00	0.00
	ATOM	808	HD22	ASN	900	28.907	33.557	33.365	1.00	0.00
	ATOM	809	C	ASN	900	29.453	29.684	37.601	1.00	15.96
	ATOM	810	O	ASN	900	28.698	29.696	38.592	1.00	16.51
50	ATOM	811	N	LEU	901	30.598	29.001	37.512	1.00	12.88
	ATOM	812	H	LEU	901	30.951	28.858	36.600	1.00	0.00
	ATOM	813	CA	LEU	901	31.201	28.323	38.673	1.00	14.79
	ATOM	814	CB	LEU	901	32.287	27.329	38.234	1.00	15.66
	ATOM	815	CG	LEU	901	33.188	26.660	39.289	1.00	14.83
55	ATOM	816	CD1	LEU	901	32.401	25.667	40.143	1.00	15.33
	ATOM	817	CD2	LEU	901	34.287	25.950	38.533	1.00	9.33
	ATOM	818	C	LEU	901	31.832	29.351	39.621	1.00	14.21
	ATOM	819	O	LEU	901	32.620	30.205	39.222	1.00	16.97
	ATOM	820	N	LEU	902	31.478	29.256	40.892	1.00	15.38
60	ATOM	821	H	LEU	902	30.808	28.566	41.120	1.00	0.00
	ATOM	822	CA	LEU	902	31.946	30.167	41.939	1.00	15.70
	ATOM	823	CB	LEU	902	30.715	30.723	42.726	1.00	11.96

	ATOM	824	CG	LEU	902	29.646	31.580	41.968	1.00	11.30
	ATOM	825	CD1	LEU	902	28.552	31.921	42.941	1.00	7.04
	ATOM	826	CD2	LEU	902	30.243	32.904	41.379	1.00	11.61
	ATOM	827	C	LEU	902	32.902	29.512	42.875	1.00	18.18
5	ATOM	828	O	LEU	902	33.743	30.158	43.489	1.00	22.72
	ATOM	829	N	GLY	903	32.802	28.210	43.077	1.00	20.38
	ATOM	830	H	GLY	903	32.115	27.698	42.601	1.00	0.00
	ATOM	831	CA	GLY	903	33.738	27.523	44.012	1.00	17.34
	ATOM	832	C	GLY	903	33.390	26.045	44.275	1.00	18.77
10	ATOM	833	O	GLY	903	32.457	25.493	43.666	1.00	17.49
	ATOM	834	N	ALA	904	34.118	25.370	45.178	1.00	15.56
	ATOM	835	H	ALA	904	34.892	25.823	45.573	1.00	0.00
	ATOM	836	CA	ALA	904	33.798	23.975	45.469	1.00	15.00
	ATOM	837	CB	ALA	904	34.312	22.984	44.436	1.00	15.39
15	ATOM	838	C	ALA	904	34.425	23.521	46.737	1.00	14.65
	ATOM	839	O	ALA	904	35.416	24.015	47.237	1.00	14.33
	ATOM	840	N	CYS	905	33.790	22.544	47.319	1.00	15.85
	ATOM	841	H	CYS	905	32.951	22.273	46.886	1.00	0.00
	ATOM	842	CA	CYS	905	34.215	21.884	48.556	1.00	16.43
20	ATOM	843	CB	CYS	905	33.128	21.898	49.591	1.00	15.29
	ATOM	844	SG	CYS	905	32.400	23.527	49.852	1.00	16.86
	ATOM	845	C	CYS	905	34.499	20.436	48.206	1.00	16.29
	ATOM	846	O	CYS	905	33.634	19.643	47.814	1.00	17.57
	ATOM	847	N	THR	906	35.788	20.288	48.040	1.00	16.30
25	ATOM	848	H	THR	906	36.348	21.086	48.025	1.00	0.00
	ATOM	849	CA	THR	906	36.358	19.007	47.685	1.00	17.47
	ATOM	850	CB	THR	906	37.266	19.146	46.396	1.00	15.78
	ATOM	851	OG1	THR	906	38.438	19.803	46.847	1.00	13.61
	ATOM	852	HG1	THR	906	39.097	19.744	46.143	1.00	0.00
30	ATOM	853	CG2	THR	906	36.613	19.827	45.204	1.00	9.56
	ATOM	854	C	THR	906	37.203	18.377	48.813	1.00	20.28
	ATOM	855	O	THR	906	37.547	17.206	48.744	1.00	21.94
	ATOM	856	N	LYS	907	37.596	19.121	49.871	1.00	20.91
	ATOM	857	H	LYS	907	37.302	20.047	49.884	1.00	0.00
35	ATOM	858	CA	LYS	907	38.429	18.539	50.955	1.00	21.22
	ATOM	859	CB	LYS	907	38.555	19.528	52.193	1.00	21.48
	ATOM	860	C	LYS	907	37.890	17.204	51.463	1.00	23.34
	ATOM	861	O	LYS	907	36.715	17.037	51.714	1.00	24.42
	ATOM	862	N	PRO	908	38.687	16.171	51.585	1.00	24.24
40	ATOM	863	CD	PRO	908	39.839	15.888	50.752	1.00	24.78
	ATOM	864	CA	PRO	908	38.373	14.884	52.209	1.00	26.09
	ATOM	865	CB	PRO	908	39.741	14.474	52.741	1.00	26.25
	ATOM	866	CG	PRO	908	40.706	15.315	51.895	1.00	25.56
	ATOM	867	C	PRO	908	37.278	14.548	53.204	1.00	26.87
45	ATOM	868	O	PRO	908	36.467	13.596	52.986	1.00	32.72
	ATOM	869	N	GLY	909	37.177	15.283	54.296	1.00	24.01
	ATOM	870	H	GLY	909	37.685	16.106	54.434	1.00	0.00
	ATOM	871	CA	GLY	909	36.124	14.791	55.260	1.00	23.31
	ATOM	872	C	GLY	909	34.644	15.077	55.083	1.00	24.23
50	ATOM	873	O	GLY	909	33.824	14.796	55.975	1.00	22.95
	ATOM	874	N	GLY	910	34.246	15.595	53.905	1.00	22.01
	ATOM	875	H	GLY	910	34.855	15.570	53.129	1.00	0.00
	ATOM	876	CA	GLY	910	32.843	15.973	53.697	1.00	17.66
	ATOM	877	C	GLY	910	32.505	15.733	52.255	1.00	18.08
55	ATOM	878	O	GLY	910	33.393	15.325	51.497	1.00	18.61
	ATOM	879	N	PRO	911	31.237	15.935	51.864	1.00	18.03
	ATOM	880	CD	PRO	911	30.076	16.397	52.683	1.00	19.10
	ATOM	881	CA	PRO	911	30.850	15.656	50.459	1.00	17.89
	ATOM	882	CB	PRO	911	29.318	15.598	50.524	1.00	17.67
60	ATOM	883	CG	PRO	911	28.970	16.599	51.627	1.00	18.65
	ATOM	884	C	PRO	911	31.367	16.645	49.386	1.00	16.98
	ATOM	885	O	PRO	911	31.665	17.829	49.624	1.00	14.66

	ATOM	886	N	LEU	912	31.598	16.130	48.185	1.00	15.56
	ATOM	887	H	LEU	912	31.661	15.161	48.143	1.00	0.00
	ATOM	888	CA	LEU	912	32.020	17.056	47.085	1.00	16.35
	ATOM	889	CB	LEU	912	32.334	16.203	45.808	1.00	15.57
5	ATOM	890	CG	LEU	912	32.528	16.952	44.485	1.00	13.48
	ATOM	891	CD1	LEU	912	33.643	17.931	44.700	1.00	17.88
	ATOM	892	CD2	LEU	912	32.882	16.001	43.346	1.00	10.85
	ATOM	893	C	LEU	912	30.822	18.078	46.801	1.00	17.94
	ATOM	894	O	LEU	912	29.604	17.732	46.739	1.00	16.04
10	ATOM	895	N	MET	913	31.128	19.369	46.679	1.00	16.05
	ATOM	896	H	MET	913	32.040	19.669	46.849	1.00	0.00
	ATOM	897	CA	MET	913	30.022	20.300	46.368	1.00	16.47
	ATOM	898	CB	MET	913	29.571	21.109	47.603	1.00	17.98
	ATOM	899	CG	MET	913	28.915	20.210	48.676	1.00	21.10
15	ATOM	900	SD	MET	913	28.905	21.084	50.266	1.00	28.79
	ATOM	901	CE	MET	913	27.177	21.093	50.512	1.00	25.44
	ATOM	902	C	MET	913	30.509	21.275	45.311	1.00	14.82
	ATOM	903	O	MET	913	31.681	21.716	45.348	1.00	13.28
	ATOM	904	N	VAL	914	29.616	21.452	44.296	1.00	14.04
20	ATOM	905	H	VAL	914	28.784	20.929	44.328	1.00	0.00
	ATOM	906	CA	VAL	914	29.887	22.367	43.157	1.00	13.28
	ATOM	907	CB	VAL	914	29.733	21.675	41.739	1.00	13.64
	ATOM	908	CG1	VAL	914	30.131	22.640	40.571	1.00	10.08
	ATOM	909	CG2	VAL	914	30.701	20.433	41.692	1.00	10.38
25	ATOM	910	C	VAL	914	28.934	23.514	43.270	1.00	12.17
	ATOM	911	O	VAL	914	27.745	23.354	43.244	1.00	10.77
	ATOM	912	N	ILE	915	29.554	24.639	43.616	1.00	14.51
	ATOM	913	H	ILE	915	30.536	24.605	43.681	1.00	0.00
	ATOM	914	CA	ILE	915	28.886	25.897	43.859	1.00	12.90
30	ATOM	915	CB	ILE	915	29.615	26.593	45.065	1.00	8.58
	ATOM	916	CG2	ILE	915	28.789	27.846	45.400	1.00	7.68
	ATOM	917	CG1	ILE	915	29.668	25.707	46.353	1.00	10.26
	ATOM	918	CD1	ILE	915	30.926	25.985	47.182	1.00	11.87
	ATOM	919	C	ILE	915	28.835	26.771	42.651	1.00	13.14
35	ATOM	920	O	ILE	915	29.872	27.060	42.062	1.00	15.44
	ATOM	921	N	VAL	916	27.663	27.213	42.264	1.00	14.36
	ATOM	922	H	VAL	916	26.872	27.005	42.803	1.00	0.00
	ATOM	923	CA	VAL	916	27.496	28.094	41.107	1.00	13.90
	ATOM	924	CB	VAL	916	26.929	27.369	39.816	1.00	12.78
40	ATOM	925	CG1	VAL	916	27.866	26.284	39.331	1.00	12.94
	ATOM	926	CG2	VAL	916	25.577	26.762	40.130	1.00	7.89
	ATOM	927	C	VAL	916	26.525	29.179	41.424	1.00	15.82
	ATOM	928	O	VAL	916	25.868	29.239	42.487	1.00	14.32
	ATOM	929	N	GLU	917	26.423	30.091	40.455	1.00	19.15
45	ATOM	930	H	GLU	917	27.019	30.027	39.679	1.00	0.00
	ATOM	931	CA	GLU	917	25.453	31.220	40.582	1.00	19.33
	ATOM	932	CB	GLU	917	25.320	32.104	39.317	1.00	21.41
	ATOM	933	CG	GLU	917	26.542	33.021	39.192	1.00	28.75
	ATOM	934	CD	GLU	917	26.676	33.567	37.740	1.00	33.02
50	ATOM	935	OE1	GLU	917	27.186	34.695	37.606	1.00	34.78
	ATOM	936	OE2	GLU	917	26.292	32.873	36.779	1.00	31.14
	ATOM	937	C	GLU	917	24.034	30.797	40.805	1.00	17.15
	ATOM	938	O	GLU	917	23.517	29.899	40.150	1.00	16.18
	ATOM	939	N	PHE	918	23.403	31.551	41.689	1.00	16.63
55	ATOM	940	H	PHE	918	23.923	32.260	42.113	1.00	0.00
	ATOM	941	CA	PHE	918	22.004	31.405	42.002	1.00	15.18
	ATOM	942	CB	PHE	918	21.683	31.855	43.437	1.00	13.87
	ATOM	943	CG	PHE	918	20.240	31.621	43.701	1.00	12.92
	ATOM	944	CD1	PHE	918	19.718	30.329	43.699	1.00	12.03
60	ATOM	945	CD2	PHE	918	19.391	32.708	43.925	1.00	15.12
	ATOM	946	CE1	PHE	918	18.375	30.093	43.918	1.00	13.89
	ATOM	947	CE2	PHE	918	18.029	32.482	44.149	1.00	13.17

	ATOM	948	CZ	PHE	918	17.525	31.178	44.148	1.00	13.95
	ATOM	949	C	PHE	918	21.237	32.355	41.000	1.00	17.24
	ATOM	950	O	PHE	918	21.486	33.561	40.836	1.00	19.95
	ATOM	951	N	CYS	919	20.316	31.743	40.246	1.00	17.94
5	ATOM	952	H	CYS	919	20.312	30.776	40.354	1.00	0.00
	ATOM	953	CA	CYS	919	19.386	32.329	39.260	1.00	16.08
	ATOM	954	CB	CYS	919	19.389	31.522	37.969	1.00	13.01
	ATOM	955	SG	CYS	919	20.987	31.689	37.148	1.00	19.26
	ATOM	956	C	CYS	919	17.995	32.279	39.888	1.00	17.32
10	ATOM	957	O	CYS	919	17.406	31.198	40.029	1.00	15.73
	ATOM	958	N	LYS	920	17.543	33.479	40.302	1.00	19.02
	ATOM	959	H	LYS	920	18.199	34.193	40.216	1.00	0.00
	ATOM	960	CA	LYS	920	16.236	33.797	40.955	1.00	21.12
	ATOM	961	CB	LYS	920	15.847	35.362	40.867	1.00	25.00
15	ATOM	962	CG	LYS	920	15.455	36.167	42.167	1.00	26.84
	ATOM	963	CD	LYS	920	16.382	35.868	43.455	1.00	33.07
	ATOM	964	CE	LYS	920	17.693	36.718	43.835	1.00	32.36
	ATOM	965	NZ	LYS	920	18.880	35.949	44.285	1.00	31.79
	ATOM	966	HZ1	LYS	920	19.053	35.227	43.552	1.00	0.00
20	ATOM	967	HZ2	LYS	920	18.745	35.479	45.202	1.00	0.00
	ATOM	968	HZ3	LYS	920	19.698	36.593	44.321	1.00	0.00
	ATOM	969	C	LYS	920	15.018	33.079	40.454	1.00	18.84
	ATOM	970	O	LYS	920	14.351	32.385	41.157	1.00	17.15
	ATOM	971	N	PHE	921	14.712	33.210	39.225	1.00	21.82
25	ATOM	972	H	PHE	921	15.348	33.648	38.627	1.00	0.00
	ATOM	973	CA	PHE	921	13.496	32.608	38.654	1.00	23.70
	ATOM	974	CB	PHE	921	13.156	33.383	37.345	1.00	23.83
	ATOM	975	CG	PHE	921	13.024	34.774	37.752	1.00	26.04
	ATOM	976	CD1	PHE	921	11.934	35.191	38.528	1.00	32.38
30	ATOM	977	CD2	PHE	921	14.007	35.681	37.401	1.00	25.14
	ATOM	978	CE1	PHE	921	11.858	36.544	38.944	1.00	34.87
	ATOM	979	CE2	PHE	921	13.927	37.007	37.808	1.00	28.94
	ATOM	980	CZ	PHE	921	12.858	37.464	38.585	1.00	30.67
	ATOM	981	C	PHE	921	13.468	31.127	38.378	1.00	23.36
35	ATOM	982	O	PHE	921	12.423	30.580	38.006	1.00	22.90
	ATOM	983	N	GLY	922	14.616	30.452	38.454	1.00	22.12
	ATOM	984	H	GLY	922	15.442	30.885	38.759	1.00	0.00
	ATOM	985	CA	GLY	922	14.536	29.012	38.146	1.00	19.67
	ATOM	986	C	GLY	922	14.527	28.615	36.669	1.00	20.65
40	ATOM	987	O	GLY	922	15.021	29.348	35.795	1.00	19.51
	ATOM	988	N	ASN	923	14.017	27.421	36.333	1.00	19.03
	ATOM	989	H	ASN	923	13.581	26.894	37.027	1.00	0.00
	ATOM	990	CA	ASN	923	14.110	27.057	34.918	1.00	19.88
	ATOM	991	CB	ASN	923	14.063	25.516	34.823	1.00	23.12
45	ATOM	992	CG	ASN	923	12.692	24.989	34.694	1.00	22.71
	ATOM	993	OD1	ASN	923	12.097	24.850	33.620	1.00	23.53
	ATOM	994	ND2	ASN	923	12.120	24.657	35.813	1.00	27.07
	ATOM	995	HD21	ASN	923	12.516	24.723	36.702	1.00	0.00
	ATOM	996	HD22	ASN	923	11.218	24.316	35.697	1.00	0.00
50	ATOM	997	C	ASN	923	13.134	27.752	33.981	1.00	18.78
	ATOM	998	O	ASN	923	12.011	28.092	34.331	1.00	18.41
	ATOM	999	N	LEU	924	13.559	27.899	32.740	1.00	17.52
	ATOM	1000	H	LEU	924	14.446	27.545	32.515	1.00	0.00
	ATOM	1001	CA	LEU	924	12.807	28.630	31.763	1.00	16.30
55	ATOM	1002	CB	LEU	924	13.783	28.965	30.586	1.00	14.60
	ATOM	1003	CG	LEU	924	13.207	30.056	29.657	1.00	14.85
	ATOM	1004	CD1	LEU	924	13.049	31.376	30.455	1.00	12.73
	ATOM	1005	CD2	LEU	924	14.117	30.265	28.479	1.00	11.02
	ATOM	1006	C	LEU	924	11.572	27.916	31.334	1.00	19.62
60	ATOM	1007	O	LEU	924	10.557	28.565	31.076	1.00	16.08
	ATOM	1008	N	SER	925	11.563	26.581	31.271	1.00	21.95
	ATOM	1009	H	SER	925	12.374	26.090	31.509	1.00	0.00

	ATOM	1010	CA	SER	925	10.263	25.946	30.858	1.00	24.99
	ATOM	1011	CB	SER	925	10.409	24.400	30.852	1.00	28.40
	ATOM	1012	OG	SER	925	9.228	23.839	30.219	1.00	32.84
	ATOM	1013	HG	SER	925	9.324	22.881	30.168	1.00	0.00
5	ATOM	1014	C	SER	925	9.046	26.335	31.770	1.00	21.30
	ATOM	1015	O	SER	925	7.976	26.837	31.424	1.00	17.59
	ATOM	1016	N	THR	926	9.274	26.091	33.030	1.00	19.92
	ATOM	1017	H	THR	926	10.113	25.626	33.236	1.00	0.00
	ATOM	1018	CA	THR	926	8.296	26.367	34.083	1.00	20.24
10	ATOM	1019	CB	THR	926	8.949	25.925	35.444	1.00	19.49
	ATOM	1020	OG1	THR	926	9.311	24.535	35.369	1.00	19.99
	ATOM	1021	HG1	THR	926	9.256	24.187	36.272	1.00	0.00
	ATOM	1022	CG2	THR	926	7.990	26.103	36.636	1.00	19.65
	ATOM	1023	C	THR	926	7.961	27.878	34.066	1.00	20.20
15	ATOM	1024	O	THR	926	6.832	28.355	34.196	1.00	21.25
	ATOM	1025	N	TYR	927	9.001	28.678	33.967	1.00	18.43
	ATOM	1026	H	TYR	927	9.918	28.322	33.940	1.00	0.00
	ATOM	1027	CA	TYR	927	8.769	30.099	33.957	1.00	18.77
	ATOM	1028	CB	TYR	927	10.166	30.842	33.916	1.00	18.01
20	ATOM	1029	CG	TYR	927	9.884	32.267	33.932	1.00	16.90
	ATOM	1030	CD1	TYR	927	9.518	32.852	35.137	1.00	18.40
	ATOM	1031	CE1	TYR	927	9.202	34.198	35.163	1.00	17.87
	ATOM	1032	CD2	TYR	927	9.944	33.017	32.733	1.00	21.04
	ATOM	1033	CE2	TYR	927	9.628	34.386	32.751	1.00	19.22
25	ATOM	1034	CZ	TYR	927	9.261	34.946	33.990	1.00	21.81
	ATOM	1035	OH	TYR	927	8.985	36.284	34.122	1.00	23.96
	ATOM	1036	HH	TYR	927	9.073	36.753	33.289	1.00	0.00
	ATOM	1037	C	TYR	927	7.854	30.518	32.813	1.00	16.35
	ATOM	1038	O	TYR	927	6.771	30.983	33.040	1.00	16.66
30	ATOM	1039	N	LEU	928	8.200	30.378	31.582	1.00	15.19
	ATOM	1040	H	LEU	928	9.028	29.888	31.391	1.00	0.00
	ATOM	1041	CA	LEU	928	7.295	30.836	30.475	1.00	17.09
	ATOM	1042	CB	LEU	928	7.838	30.421	29.086	1.00	13.39
	ATOM	1043	CG	LEU	928	9.242	31.003	28.971	1.00	15.85
35	ATOM	1044	CD1	LEU	928	9.881	30.554	27.664	1.00	19.03
	ATOM	1045	CD2	LEU	928	9.180	32.559	28.982	1.00	18.38
	ATOM	1046	C	LEU	928	5.927	30.248	30.628	1.00	19.32
	ATOM	1047	O	LEU	928	4.932	30.929	30.384	1.00	18.91
	ATOM	1048	N	ARG	929	5.823	28.973	31.085	1.00	20.90
40	ATOM	1049	H	ARG	929	6.621	28.430	31.261	1.00	0.00
	ATOM	1050	CA	ARG	929	4.463	28.374	31.216	1.00	21.61
	ATOM	1051	CB	ARG	929	4.651	26.974	31.604	1.00	24.29
	ATOM	1052	CG	ARG	929	3.471	26.155	31.159	1.00	33.26
	ATOM	1053	CD	ARG	929	3.901	24.683	31.081	1.00	42.70
45	ATOM	1054	NE	ARG	929	4.689	24.345	32.307	1.00	51.65
	ATOM	1055	HE	ARG	929	4.259	24.469	33.180	1.00	0.00
	ATOM	1056	CZ	ARG	929	5.971	23.917	32.294	1.00	54.12
	ATOM	1057	NH1	ARG	929	6.553	23.655	33.452	1.00	54.36
	ATOM	1058	HH11	ARG	929	6.062	23.780	34.311	1.00	0.00
50	ATOM	1059	HH12	ARG	929	7.497	23.323	33.451	1.00	0.00
	ATOM	1060	NH2	ARG	929	6.669	23.708	31.162	1.00	58.18
	ATOM	1061	HH21	ARG	929	6.248	23.872	30.271	1.00	0.00
	ATOM	1062	HH22	ARG	929	7.609	23.371	31.207	1.00	0.00
	ATOM	1063	C	ARG	929	3.577	29.095	32.211	1.00	22.15
55	ATOM	1064	O	ARG	929	2.364	28.988	32.264	1.00	21.68
	ATOM	1065	N	SER	930	4.203	29.805	33.129	1.00	23.87
	ATOM	1066	H	SER	930	5.183	29.797	33.155	1.00	0.00
	ATOM	1067	CA	SER	930	3.499	30.610	34.143	1.00	21.76
	ATOM	1068	CB	SER	930	4.353	30.718	35.434	1.00	19.48
60	ATOM	1069	OG	SER	930	5.470	31.537	35.145	1.00	16.46
	ATOM	1070	HG	SER	930	5.878	31.823	35.963	1.00	0.00
	ATOM	1071	C	SER	930	3.188	32.009	33.659	1.00	21.10



	ATOM	1072	O	SER	930	2.594	32.759	34.430	1.00	24.46
	ATOM	1073	N	LYS	931	3.591	32.428	32.449	1.00	19.98
	ATOM	1074	H	LYS	931	4.177	31.828	31.947	1.00	0.00
	ATOM	1075	CA	LYS	931	3.327	33.795	31.950	1.00	19.54
5	ATOM	1076	CB	LYS	931	4.589	34.445	31.443	1.00	19.40
	ATOM	1077	CG	LYS	931	5.710	34.572	32.526	1.00	23.38
	ATOM	1078	CD	LYS	931	5.169	34.966	33.895	1.00	20.73
	ATOM	1079	CE	LYS	931	5.505	36.389	34.320	1.00	27.24
	ATOM	1080	NZ	LYS	931	5.299	37.318	33.219	1.00	21.85
10	ATOM	1081	HZ1	LYS	931	4.396	37.090	32.763	1.00	0.00
	ATOM	1082	HZ2	LYS	931	6.060	37.202	32.519	1.00	0.00
	ATOM	1083	HZ3	LYS	931	5.284	38.299	33.565	1.00	0.00
	ATOM	1084	C	LYS	931	2.332	33.879	30.819	1.00	20.69
	ATOM	1085	O	LYS	931	2.184	34.889	30.126	1.00	21.58
15	ATOM	1086	N	ARG	932	1.574	32.817	30.603	1.00	21.15
	ATOM	1087	H	ARG	932	1.775	32.037	31.154	1.00	0.00
	ATOM	1088	CA	ARG	932	0.564	32.800	29.504	1.00	21.41
	ATOM	1089	CB	ARG	932	-0.096	31.405	29.460	1.00	21.89
	ATOM	1090	CG	ARG	932	0.951	30.308	29.246	1.00	19.66
20	ATOM	1091	CD	ARG	932	0.977	29.867	27.811	1.00	20.21
	ATOM	1092	NE	ARG	932	1.889	28.731	27.703	1.00	18.67
	ATOM	1093	HE	ARG	932	2.837	28.855	27.898	1.00	0.00
	ATOM	1094	CZ	ARG	932	1.426	27.500	27.409	1.00	21.51
	ATOM	1095	NH1	ARG	932	2.317	26.500	27.292	1.00	15.25
25	ATOM	1096	HH11	ARG	932	3.297	26.665	27.423	1.00	0.00
	ATOM	1097	HH12	ARG	932	1.996	25.582	27.068	1.00	0.00
	ATOM	1098	NH2	ARG	932	0.084	27.230	27.281	1.00	20.54
	ATOM	1099	HH21	ARG	932	-0.598	27.946	27.423	1.00	0.00
	ATOM	1100	HH22	ARG	932	-0.210	26.301	27.061	1.00	0.00
30	ATOM	1101	C	ARG	932	-0.491	33.898	29.669	1.00	21.72
	ATOM	1102	O	ARG	932	-0.985	34.414	28.663	1.00	20.22
	ATOM	1103	N	ASN	933	-0.950	34.165	30.916	1.00	22.13
	ATOM	1104	H	ASN	933	-0.559	33.644	31.652	1.00	0.00
	ATOM	1105	CA	ASN	933	-1.920	35.269	31.139	1.00	23.71
35	ATOM	1106	CB	ASN	933	-2.892	34.869	32.292	1.00	25.75
	ATOM	1107	CG	ASN	933	-4.243	35.633	32.354	1.00	29.48
	ATOM	1108	OD1	ASN	933	-4.910	35.873	31.356	1.00	30.03
	ATOM	1109	ND2	ASN	933	-4.831	35.934	33.499	1.00	29.53
	ATOM	1110	HD21	ASN	933	-4.507	35.730	34.394	1.00	0.00
40	ATOM	1111	HD22	ASN	933	-5.672	36.419	33.415	1.00	0.00
	ATOM	1112	C	ASN	933	-1.163	36.617	31.429	1.00	24.80
	ATOM	1113	O	ASN	933	-1.736	37.649	31.816	1.00	23.64
	ATOM	1114	N	GLU	934	0.145	36.654	31.078	1.00	24.28
	ATOM	1115	H	GLU	934	0.517	35.816	30.745	1.00	0.00
45	ATOM	1116	CA	GLU	934	1.066	37.815	31.231	1.00	23.94
	ATOM	1117	CB	GLU	934	1.852	37.665	32.457	1.00	25.15
	ATOM	1118	CG	GLU	934	0.991	37.875	33.672	1.00	31.71
	ATOM	1119	CD	GLU	934	1.782	37.302	34.833	1.00	35.16
	ATOM	1120	OE1	GLU	934	1.683	36.109	35.099	1.00	40.39
50	ATOM	1121	OE2	GLU	934	2.560	38.037	35.425	1.00	38.33
	ATOM	1122	C	GLU	934	2.060	37.987	30.095	1.00	24.50
	ATOM	1123	O	GLU	934	3.228	38.328	30.286	1.00	25.85
	ATOM	1124	N	PHE	935	1.570	37.802	28.888	1.00	22.27
	ATOM	1125	H	PHE	935	0.613	37.603	28.833	1.00	0.00
55	ATOM	1126	CA	PHE	935	2.339	37.961	27.661	1.00	22.45
	ATOM	1127	CB	PHE	935	2.680	36.566	27.007	1.00	23.10
	ATOM	1128	CG	PHE	935	3.270	36.648	25.610	1.00	18.95
	ATOM	1129	CD1	PHE	935	2.449	36.671	24.491	1.00	15.94
	ATOM	1130	CD2	PHE	935	4.663	36.743	25.444	1.00	17.90
60	ATOM	1131	CE1	PHE	935	3.016	36.788	23.226	1.00	19.40
	ATOM	1132	CE2	PHE	935	5.255	36.859	24.178	1.00	18.94
	ATOM	1133	CZ	PHE	935	4.415	36.880	23.072	1.00	21.33

	ATOM	1134	C	PHE	935	1.535	38.813	26.647	1.00	25.01
	ATOM	1135	O	PHE	935	0.306	38.791	26.632	1.00	24.55
	ATOM	1136	N	VAL	936	2.217	39.616	25.828	1.00	26.79
	ATOM	1137	H	VAL	936	3.182	39.671	26.011	1.00	0.00
5	ATOM	1138	CA	VAL	936	1.686	40.502	24.769	1.00	28.80
	ATOM	1139	CB	VAL	936	1.480	41.996	25.145	1.00	33.06
	ATOM	1140	CG1	VAL	936	0.094	42.038	25.685	1.00	32.64
	ATOM	1141	CG2	VAL	936	2.515	42.596	26.178	1.00	32.57
	ATOM	1142	C	VAL	936	2.785	40.559	23.767	1.00	29.12
10	ATOM	1143	O	VAL	936	3.925	40.723	24.188	1.00	25.43
	ATOM	1144	N	PRO	937	2.517	40.385	22.470	1.00	32.27
	ATOM	1145	CD	PRO	937	1.205	40.192	21.884	1.00	33.79
	ATOM	1146	CA	PRO	937	3.555	40.277	21.414	1.00	34.65
	ATOM	1147	CB	PRO	937	2.845	39.960	20.128	1.00	31.59
15	ATOM	1148	CG	PRO	937	1.653	39.292	20.727	1.00	34.38
	ATOM	1149	C	PRO	937	4.372	41.552	21.257	1.00	38.78
	ATOM	1150	O	PRO	937	5.600	41.547	21.176	1.00	39.37
	ATOM	1151	N	TYR	938	3.690	42.666	21.168	1.00	43.58
	ATOM	1152	H	TYR	938	2.738	42.685	21.389	1.00	0.00
20	ATOM	1153	CA	TYR	938	4.322	44.003	21.023	1.00	50.41
	ATOM	1154	CB	TYR	938	3.788	44.608	19.666	1.00	49.04
	ATOM	1155	C	TYR	938	3.735	44.566	22.358	1.00	55.69
	ATOM	1156	O	TYR	938	2.498	44.549	22.549	1.00	56.83
	ATOM	1158	CB	ASP	998	6.508	42.476	35.275	1.00	28.93
25	ATOM	1159	C	ASP	998	5.213	41.987	33.192	1.00	29.56
	ATOM	1160	O	ASP	998	5.538	40.841	33.371	1.00	30.30
	ATOM	1161	HT1	ASP	998	3.720	42.227	35.234	1.00	0.00
	ATOM	1162	HT2	ASP	998	3.345	43.678	34.450	1.00	0.00
	ATOM	1163	N	ASP	998	4.068	43.184	35.007	1.00	31.56
30	ATOM	1164	HT3	ASP	998	4.211	43.693	35.903	1.00	0.00
	ATOM	1165	CA	ASP	998	5.377	43.016	34.308	1.00	30.69
	ATOM	1166	N	PHE	999	4.518	42.282	32.122	1.00	28.82
	ATOM	1167	H	PHE	999	4.230	43.191	31.918	1.00	0.00
	ATOM	1168	CA	PHE	999	4.350	41.306	31.044	1.00	26.91
35	ATOM	1169	CB	PHE	999	3.347	41.914	30.059	1.00	28.34
	ATOM	1170	CG	PHE	999	1.915	41.744	30.372	1.00	34.01
	ATOM	1171	CD1	PHE	999	1.059	41.324	29.301	1.00	36.82
	ATOM	1172	CD2	PHE	999	1.355	41.990	31.641	1.00	33.75
	ATOM	1173	CE1	PHE	999	-0.342	41.118	29.478	1.00	35.71
40	ATOM	1174	CE2	PHE	999	-0.042	41.795	31.834	1.00	35.51
	ATOM	1175	CZ	PHE	999	-0.882	41.370	30.755	1.00	36.42
	ATOM	1176	C	PHE	999	5.613	40.852	30.242	1.00	27.29
	ATOM	1177	O	PHE	999	6.618	41.578	30.096	1.00	25.99
	ATOM	1178	N	LEU	1000	5.615	39.605	29.754	1.00	24.56
45	ATOM	1179	H	LEU	1000	4.908	38.993	30.029	1.00	0.00
	ATOM	1180	CA	LEU	1000	6.674	39.157	28.855	1.00	21.27
	ATOM	1181	CB	LEU	1000	6.830	37.663	28.689	1.00	21.02
	ATOM	1182	CG	LEU	1000	7.483	36.797	29.724	1.00	20.29
	ATOM	1183	CD1	LEU	1000	7.090	35.427	29.279	1.00	19.43
50	ATOM	1184	CD2	LEU	1000	9.018	36.957	29.858	1.00	17.94
	ATOM	1185	C	LEU	1000	6.145	39.607	27.520	1.00	21.17
	ATOM	1186	O	LEU	1000	4.938	39.655	27.267	1.00	21.34
	ATOM	1187	N	THR	1001	7.028	39.804	26.587	1.00	21.60
	ATOM	1188	H	THR	1001	7.951	39.585	26.783	1.00	0.00
55	ATOM	1189	CA	THR	1001	6.660	40.281	25.244	1.00	21.24
	ATOM	1190	CB	THR	1001	6.984	41.813	25.030	1.00	20.92
	ATOM	1191	OG1	THR	1001	8.380	41.964	25.197	1.00	23.92
	ATOM	1192	HG1	THR	1001	8.544	42.915	25.154	1.00	0.00
	ATOM	1193	CG2	THR	1001	6.377	42.768	26.028	1.00	17.87
60	ATOM	1194	C	THR	1001	7.469	39.499	24.236	1.00	20.92
	ATOM	1195	O	THR	1001	8.404	38.767	24.578	1.00	21.09
	ATOM	1196	N	LEU	1002	7.193	39.626	22.949	1.00	21.67

	ATOM	1197	H	LEU	1002	6.481	40.244	22.671	1.00	0.00
	ATOM	1198	CA	LEU	1002	7.993	38.899	21.940	1.00	22.89
	ATOM	1199	CB	LEU	1002	7.272	39.248	20.665	1.00	22.48
	ATOM	1200	CG	LEU	1002	7.660	38.493	19.446	1.00	24.55
5	ATOM	1201	CD1	LEU	1002	7.643	36.963	19.691	1.00	25.92
	ATOM	1202	CD2	LEU	1002	6.709	39.009	18.338	1.00	26.20
	ATOM	1203	C	LEU	1002	9.508	39.296	21.986	1.00	23.74
	ATOM	1204	O	LEU	1002	10.487	38.551	21.727	1.00	24.39
	ATOM	1205	N	GLU	1003	9.775	40.575	22.341	1.00	24.14
10	ATOM	1206	H	GLU	1003	9.015	41.192	22.461	1.00	0.00
	ATOM	1207	CA	GLU	1003	11.164	41.026	22.446	1.00	20.97
	ATOM	1208	CB	GLU	1003	11.172	42.419	22.965	1.00	23.17
	ATOM	1209	CG	GLU	1003	12.572	42.973	22.557	1.00	29.21
	ATOM	1210	CD	GLU	1003	12.841	44.378	23.071	1.00	32.91
15	ATOM	1211	OE1	GLU	1003	11.881	45.027	23.520	1.00	34.92
	ATOM	1212	OE2	GLU	1003	14.019	44.784	23.050	1.00	35.11
	ATOM	1213	C	GLU	1003	11.899	40.117	23.451	1.00	20.17
	ATOM	1214	O	GLU	1003	12.997	39.631	23.255	1.00	20.77
	ATOM	1215	N	HIS	1004	11.297	39.896	24.608	1.00	18.66
20	ATOM	1216	H	HIS	1004	10.423	40.318	24.747	1.00	0.00
	ATOM	1217	CA	HIS	1004	11.859	39.018	25.650	1.00	16.11
	ATOM	1218	C	HIS	1004	12.115	37.636	25.104	1.00	14.31
	ATOM	1219	O	HIS	1004	13.127	37.087	25.410	1.00	16.01
	ATOM	1220	CB	HIS	1004	10.909	38.800	26.795	1.00	15.39
25	ATOM	1221	CG	HIS	1004	10.633	39.992	27.549	1.00	14.24
	ATOM	1222	ND1	HIS	1004	11.258	40.313	28.691	1.00	17.83
	ATOM	1223	HD1	HIS	1004	11.884	39.748	29.195	1.00	0.00
	ATOM	1224	CD2	HIS	1004	9.706	40.957	27.280	1.00	13.74
	ATOM	1225	NE2	HIS	1004	9.784	41.854	28.262	1.00	17.11
30	ATOM	1226	CE1	HIS	1004	10.731	41.479	29.157	1.00	14.94
	ATOM	1227	N	LEU	1005	11.221	37.050	24.322	1.00	13.63
	ATOM	1228	H	LEU	1005	10.409	37.573	24.143	1.00	0.00
	ATOM	1229	CA	LEU	1005	11.342	35.681	23.748	1.00	14.44
	ATOM	1230	CB	LEU	1005	10.024	35.326	23.049	1.00	12.32
35	ATOM	1231	CG	LEU	1005	8.866	34.721	23.879	1.00	16.30
	ATOM	1232	CD1	LEU	1005	8.813	35.267	25.291	1.00	17.07
	ATOM	1233	CD2	LEU	1005	7.657	34.768	22.969	1.00	12.24
	ATOM	1234	C	LEU	1005	12.502	35.539	22.774	1.00	15.79
	ATOM	1235	O	LEU	1005	13.263	34.555	22.849	1.00	16.62
40	ATOM	1236	N	ILE	1006	12.668	36.540	21.861	1.00	15.94
	ATOM	1237	H	ILE	1006	11.983	37.238	21.840	1.00	0.00
	ATOM	1238	CA	ILE	1006	13.817	36.556	20.872	1.00	14.92
	ATOM	1239	CB	ILE	1006	13.694	37.689	19.774	1.00	16.71
	ATOM	1240	CG2	ILE	1006	14.855	37.555	18.700	1.00	13.62
45	ATOM	1241	CG1	ILE	1006	12.255	37.629	19.200	1.00	17.08
	ATOM	1242	CD1	ILE	1006	11.852	38.969	18.499	1.00	20.74
	ATOM	1243	C	ILE	1006	15.130	36.860	21.680	1.00	14.76
	ATOM	1244	O	ILE	1006	16.207	36.399	21.349	1.00	13.80
	ATOM	1245	N	CYS	1007	15.041	37.795	22.622	1.00	12.39
50	ATOM	1246	H	CYS	1007	14.192	38.275	22.680	1.00	0.00
	ATOM	1247	CA	CYS	1007	16.130	38.129	23.460	1.00	14.00
	ATOM	1248	CB	CYS	1007	15.675	39.211	24.449	1.00	15.16
	ATOM	1249	SG	CYS	1007	16.958	39.608	25.668	1.00	20.35
	ATOM	1250	C	CYS	1007	16.609	36.884	24.210	1.00	13.20
55	ATOM	1251	O	CYS	1007	17.807	36.574	24.256	1.00	14.56
	ATOM	1252	N	TYR	1008	15.745	36.128	24.835	1.00	13.12
	ATOM	1253	H	TYR	1008	14.802	36.387	24.869	1.00	0.00
	ATOM	1254	CA	TYR	1008	16.201	34.941	25.541	1.00	12.69
	ATOM	1255	CB	TYR	1008	15.030	34.283	26.242	1.00	14.59
60	ATOM	1256	CG	TYR	1008	14.383	35.068	27.314	1.00	16.09
	ATOM	1257	CD1	TYR	1008	13.052	34.764	27.578	1.00	16.62
	ATOM	1258	CE1	TYR	1008	12.331	35.418	28.592	1.00	15.46

	ATOM	1259	CD2	TYR	1008	15.032	36.059	28.066	1.00	19.40
	ATOM	1260	CE2	TYR	1008	14.312	36.727	29.089	1.00	18.40
	ATOM	1261	CZ	TYR	1008	12.979	36.382	29.335	1.00	17.27
	ATOM	1262	OH	TYR	1008	12.326	36.864	30.438	1.00	21.02
5	ATOM	1263	HH	TYR	1008	11.463	36.464	30.538	1.00	0.00
	ATOM	1264	C	TYR	1008	16.820	33.942	24.546	1.00	14.66
	ATOM	1265	O	TYR	1008	17.866	33.324	24.832	1.00	13.22
	ATOM	1266	N	SER	1009	16.216	33.757	23.360	1.00	13.65
	ATOM	1267	H	SER	1009	15.311	34.104	23.199	1.00	0.00
10	ATOM	1268	CA	SER	1009	16.810	32.870	22.360	1.00	14.29
	ATOM	1269	CB	SER	1009	16.000	32.942	21.101	1.00	15.10
	ATOM	1270	OG	SER	1009	14.683	32.554	21.382	1.00	17.75
	ATOM	1271	HG	SER	1009	14.159	32.636	20.579	1.00	0.00
	ATOM	1272	C	SER	1009	18.256	33.180	21.943	1.00	11.87
15	ATOM	1273	O	SER	1009	19.136	32.350	21.682	1.00	11.61
	ATOM	1274	N	PHE	1010	18.457	34.464	21.627	1.00	14.47
	ATOM	1275	H	PHE	1010	17.676	35.062	21.655	1.00	0.00
	ATOM	1276	CA	PHE	1010	19.757	35.033	21.217	1.00	11.35
	ATOM	1277	CB	PHE	1010	19.608	36.608	20.969	1.00	15.78
20	ATOM	1278	CG	PHE	1010	20.879	37.386	20.803	1.00	16.59
	ATOM	1279	CD1	PHE	1010	21.311	38.232	21.856	1.00	15.51
	ATOM	1280	CD2	PHE	1010	21.708	37.220	19.631	1.00	12.86
	ATOM	1281	CE1	PHE	1010	22.582	38.869	21.704	1.00	16.04
	ATOM	1282	CE2	PHE	1010	22.953	37.865	19.495	1.00	13.44
25	ATOM	1283	CZ	PHE	1010	23.385	38.692	20.547	1.00	13.22
	ATOM	1284	C	PHE	1010	20.699	34.773	22.341	1.00	10.56
	ATOM	1285	O	PHE	1010	21.817	34.307	22.140	1.00	13.25
	ATOM	1286	N	GLN	1011	20.329	35.116	23.576	1.00	11.15
	ATOM	1287	H	GLN	1011	19.474	35.569	23.706	1.00	0.00
30	ATOM	1288	CA	GLN	1011	21.226	34.816	24.708	1.00	10.82
	ATOM	1289	CB	GLN	1011	20.596	35.242	26.008	1.00	11.24
	ATOM	1290	CG	GLN	1011	20.531	36.746	26.131	1.00	11.40
	ATOM	1291	CD	GLN	1011	19.957	36.941	27.517	1.00	16.67
	ATOM	1292	OE1	GLN	1011	20.661	36.722	28.531	1.00	16.41
35	ATOM	1293	NE2	GLN	1011	18.669	37.339	27.637	1.00	15.31
	ATOM	1294	HE21	GLN	1011	18.092	37.508	26.874	1.00	0.00
	ATOM	1295	HE22	GLN	1011	18.327	37.462	28.539	1.00	0.00
	ATOM	1296	C	GLN	1011	21.578	33.309	24.809	1.00	13.27
	ATOM	1297	O	GLN	1011	22.752	32.994	25.055	1.00	17.22
40	ATOM	1298	N	VAL	1012	20.631	32.354	24.685	1.00	12.07
	ATOM	1299	H	VAL	1012	19.693	32.625	24.636	1.00	0.00
	ATOM	1300	CA	VAL	1012	21.035	30.940	24.725	1.00	13.58
	ATOM	1301	CB	VAL	1012	19.847	29.993	24.671	1.00	15.17
	ATOM	1302	CG1	VAL	1012	20.337	28.529	24.615	1.00	9.53
45	ATOM	1303	CG2	VAL	1012	18.954	30.252	25.922	1.00	10.35
	ATOM	1304	C	VAL	1012	21.912	30.693	23.493	1.00	14.71
	ATOM	1305	O	VAL	1012	22.939	30.016	23.597	1.00	18.45
	ATOM	1306	N	ALA	1013	21.622	31.180	22.281	1.00	15.02
	ATOM	1307	H	ALA	1013	20.796	31.669	22.121	1.00	0.00
50	ATOM	1308	CA	ALA	1013	22.630	30.916	21.175	1.00	15.09
	ATOM	1309	CB	ALA	1013	22.144	31.479	19.809	1.00	10.33
	ATOM	1310	C	ALA	1013	24.043	31.515	21.488	1.00	13.18
	ATOM	1311	O	ALA	1013	25.075	30.997	21.077	1.00	13.32
	ATOM	1312	N	LYS	1014	24.184	32.619	22.216	1.00	13.23
55	ATOM	1313	H	LYS	1014	23.370	33.118	22.432	1.00	0.00
	ATOM	1314	CA	LYS	1014	25.517	33.162	22.618	1.00	13.09
	ATOM	1315	CB	LYS	1014	25.363	34.565	23.328	1.00	15.20
	ATOM	1316	CG	LYS	1014	24.906	35.746	22.453	1.00	15.92
	ATOM	1317	CD	LYS	1014	26.038	36.236	21.582	1.00	20.55
60	ATOM	1318	CE	LYS	1014	26.690	37.427	22.302	1.00	25.41
	ATOM	1319	NZ	LYS	1014	27.734	38.046	21.449	1.00	20.55
	ATOM	1320	HZ1	LYS	1014	27.329	38.252	20.519	1.00	0.00

	ATOM	1321	HZ2	LYS	1014	28.534	37.387	21.352	1.00	0.00
	ATOM	1322	HZ3	LYS	1014	28.062	38.918	21.903	1.00	0.00
	ATOM	1323	C	LYS	1014	26.269	32.213	23.593	1.00	12.73
	ATOM	1324	O	LYS	1014	27.493	32.026	23.597	1.00	13.18
5	ATOM	1325	N	GLY	1015	25.516	31.657	24.540	1.00	13.83
	ATOM	1326	H	GLY	1015	24.595	31.996	24.613	1.00	0.00
	ATOM	1327	CA	GLY	1015	26.026	30.702	25.541	1.00	11.61
	ATOM	1328	C	GLY	1015	26.475	29.424	24.836	1.00	12.05
	ATOM	1329	O	GLY	1015	27.496	28.908	25.196	1.00	11.48
10	ATOM	1330	N	MET	1016	25.719	28.893	23.876	1.00	10.52
	ATOM	1331	H	MET	1016	24.855	29.338	23.741	1.00	0.00
	ATOM	1332	CA	MET	1016	26.034	27.689	23.089	1.00	12.01
	ATOM	1333	CB	MET	1016	24.672	27.363	22.400	1.00	9.99
	ATOM	1334	CG	MET	1016	23.661	26.614	23.305	1.00	10.09
15	ATOM	1335	SD	MET	1016	24.394	25.205	24.304	1.00	13.10
	ATOM	1336	CE	MET	1016	25.503	24.227	23.277	1.00	10.89
	ATOM	1337	C	MET	1016	27.273	27.909	22.142	1.00	15.02
	ATOM	1338	O	MET	1016	28.168	27.076	21.932	1.00	13.91
	ATOM	1339	N	GLU	1017	27.369	29.096	21.553	1.00	13.53
20	ATOM	1340	H	GLU	1017	26.602	29.699	21.620	1.00	0.00
	ATOM	1341	CA	GLU	1017	28.499	29.493	20.729	1.00	10.68
	ATOM	1342	CB	GLU	1017	28.217	30.909	20.136	1.00	10.74
	ATOM	1343	CG	GLU	1017	29.468	31.336	19.402	1.00	10.82
	ATOM	1344	CD	GLU	1017	29.247	32.722	18.829	1.00	17.03
25	ATOM	1345	OE1	GLU	1017	28.787	33.597	19.583	1.00	19.17
	ATOM	1346	OE2	GLU	1017	29.574	32.924	17.655	1.00	17.37
	ATOM	1347	C	GLU	1017	29.705	29.529	21.613	1.00	11.76
	ATOM	1348	O	GLU	1017	30.788	29.181	21.213	1.00	15.59
	ATOM	1349	N	PHE	1018	29.572	30.068	22.821	1.00	14.03
30	ATOM	1350	H	PHE	1018	28.724	30.503	23.046	1.00	0.00
	ATOM	1351	CA	PHE	1018	30.653	30.112	23.784	1.00	10.71
	ATOM	1352	CB	PHE	1018	30.179	30.801	25.013	1.00	10.03
	ATOM	1353	CG	PHE	1018	31.278	30.803	26.015	1.00	12.80
	ATOM	1354	CD1	PHE	1018	31.169	30.041	27.206	1.00	13.32
35	ATOM	1355	CD2	PHE	1018	32.427	31.572	25.783	1.00	15.03
	ATOM	1356	CE1	PHE	1018	32.233	30.063	28.166	1.00	11.64
	ATOM	1357	CE2	PHE	1018	33.483	31.602	26.729	1.00	15.59
	ATOM	1358	CZ	PHE	1018	33.363	30.833	27.924	1.00	11.76
	ATOM	1359	C	PHE	1018	31.018	28.681	24.120	1.00	14.07
40	ATOM	1360	O	PHE	1018	32.166	28.273	24.026	1.00	16.87
	ATOM	1361	N	LEU	1019	30.067	27.816	24.522	1.00	15.90
	ATOM	1362	H	LEU	1019	29.163	28.152	24.666	1.00	0.00
	ATOM	1363	CA	LEU	1019	30.397	26.399	24.828	1.00	15.29
	ATOM	1364	CB	LEU	1019	29.155	25.509	25.189	1.00	16.00
45	ATOM	1365	CG	LEU	1019	28.512	25.662	26.614	1.00	18.20
	ATOM	1366	CD1	LEU	1019	27.336	24.673	26.887	1.00	16.75
	ATOM	1367	CD2	LEU	1019	29.623	25.428	27.598	1.00	16.35
	ATOM	1368	C	LEU	1019	31.074	25.714	23.655	1.00	15.79
	ATOM	1369	O	LEU	1019	32.009	24.930	23.832	1.00	16.96
50	ATOM	1370	N	ALA	1020	30.592	25.947	22.448	1.00	18.47
	ATOM	1371	H	ALA	1020	29.841	26.562	22.364	1.00	0.00
	ATOM	1372	CA	ALA	1020	31.198	25.330	21.218	1.00	19.77
	ATOM	1373	CB	ALA	1020	30.509	25.729	19.904	1.00	19.49
	ATOM	1374	C	ALA	1020	32.611	25.816	21.131	1.00	19.68
55	ATOM	1375	O	ALA	1020	33.511	25.024	20.854	1.00	23.80
	ATOM	1376	N	SER	1021	32.865	27.079	21.447	1.00	16.59
	ATOM	1377	H	SER	1021	32.128	27.700	21.642	1.00	0.00
	ATOM	1378	CA	SER	1021	34.258	27.532	21.413	1.00	15.27
	ATOM	1379	CB	SER	1021	34.296	29.069	21.570	1.00	13.71
60	ATOM	1380	OG	SER	1021	34.358	29.536	22.889	1.00	13.38
	ATOM	1381	HG	SER	1021	34.119	30.457	22.820	1.00	0.00
	ATOM	1382	C	SER	1021	35.178	26.857	22.476	1.00	17.17

	ATOM	1383	O	SER	1021	36.414	26.835	22.313	1.00	17.74
	ATOM	1384	N	ARG	1022	34.658	26.366	23.620	1.00	13.31
	ATOM	1385	H	ARG	1022	33.719	26.572	23.799	1.00	0.00
	ATOM	1386	CA	ARG	1022	35.512	25.687	24.607	1.00	14.25
5	ATOM	1387	CB	ARG	1022	34.920	25.772	26.034	1.00	17.34
	ATOM	1388	CG	ARG	1022	34.323	27.182	26.272	1.00	22.04
	ATOM	1389	CD	ARG	1022	35.186	28.349	26.781	1.00	28.72
	ATOM	1390	NE	ARG	1022	36.468	28.434	26.136	1.00	30.93
	ATOM	1391	HE	ARG	1022	36.549	28.865	25.259	1.00	0.00
10	ATOM	1392	CZ	ARG	1022	37.573	27.962	26.727	1.00	35.06
	ATOM	1393	NH1	ARG	1022	38.711	28.036	26.079	1.00	35.42
	ATOM	1394	HH11	ARG	1022	38.728	28.452	25.170	1.00	0.00
	ATOM	1395	HH12	ARG	1022	39.555	27.681	26.480	1.00	0.00
	ATOM	1396	NH2	ARG	1022	37.675	27.432	27.928	1.00	34.97
15	ATOM	1397	HH21	ARG	1022	36.879	27.331	28.522	1.00	0.00
	ATOM	1398	HH22	ARG	1022	38.573	27.115	28.242	1.00	0.00
	ATOM	1399	C	ARG	1022	35.627	24.233	24.241	1.00	15.05
	ATOM	1400	O	ARG	1022	36.083	23.383	24.991	1.00	13.70
	ATOM	1401	N	LYS	1023	35.069	23.867	23.094	1.00	17.35
20	ATOM	1402	H	LYS	1023	34.662	24.571	22.547	1.00	0.00
	ATOM	1403	CA	LYS	1023	35.065	22.511	22.565	1.00	20.35
	ATOM	1404	CB	LYS	1023	36.570	22.004	22.440	1.00	24.77
	ATOM	1405	CG	LYS	1023	37.278	22.760	21.289	1.00	29.95
	ATOM	1406	CD	LYS	1023	38.799	22.874	21.316	1.00	37.28
25	ATOM	1407	CE	LYS	1023	39.339	24.132	20.512	1.00	41.78
	ATOM	1408	NZ	LYS	1023	39.036	24.181	19.055	1.00	41.59
	ATOM	1409	HZ1	LYS	1023	38.021	24.018	18.889	1.00	0.00
	ATOM	1410	HZ2	LYS	1023	39.589	23.447	18.563	1.00	0.00
	ATOM	1411	HZ3	LYS	1023	39.306	25.116	18.690	1.00	0.00
30	ATOM	1412	C	LYS	1023	34.217	21.544	23.392	1.00	21.78
	ATOM	1413	O	LYS	1023	34.426	20.341	23.462	1.00	23.61
	ATOM	1414	N	CYS	1024	33.139	22.037	23.959	1.00	20.62
	ATOM	1415	H	CYS	1024	32.947	22.983	23.791	1.00	0.00
	ATOM	1416	CA	CYS	1024	32.212	21.225	24.733	1.00	18.86
35	ATOM	1417	CB	CYS	1024	31.968	21.964	26.120	1.00	18.55
	ATOM	1418	SG	CYS	1024	33.459	21.932	27.141	1.00	22.86
	ATOM	1419	C	CYS	1024	30.890	20.994	23.953	1.00	19.40
	ATOM	1420	O	CYS	1024	30.577	21.748	23.017	1.00	18.72
	ATOM	1421	N	ILE	1025	30.155	19.870	24.136	1.00	17.97
40	ATOM	1422	H	ILE	1025	30.490	19.168	24.730	1.00	0.00
	ATOM	1423	CA	ILE	1025	28.837	19.762	23.485	1.00	18.59
	ATOM	1424	CB	ILE	1025	28.686	18.597	22.365	1.00	21.68
	ATOM	1425	CG2	ILE	1025	29.934	18.300	21.494	1.00	20.32
	ATOM	1426	CG1	ILE	1025	28.314	17.360	23.039	1.00	22.82
45	ATOM	1427	CD1	ILE	1025	27.012	17.051	22.294	1.00	26.88
	ATOM	1428	C	ILE	1025	27.927	19.525	24.732	1.00	18.97
	ATOM	1429	O	ILE	1025	28.293	18.919	25.754	1.00	18.79
	ATOM	1430	N	HIS	1026	26.801	20.226	24.817	1.00	17.43
	ATOM	1431	H	HIS	1026	26.751	21.057	24.313	1.00	0.00
50	ATOM	1432	CA	HIS	1026	25.943	20.061	26.018	1.00	16.57
	ATOM	1433	C	HIS	1026	25.350	18.643	26.249	1.00	17.77
	ATOM	1434	O	HIS	1026	25.476	18.075	27.354	1.00	18.77
	ATOM	1435	CB	HIS	1026	24.817	21.191	25.915	1.00	11.94
	ATOM	1436	CG	HIS	1026	24.100	21.347	27.220	1.00	13.66
55	ATOM	1437	ND1	HIS	1026	23.234	20.443	27.741	1.00	11.48
	ATOM	1438	CE1	HIS	1026	22.688	20.963	28.889	1.00	9.73
	ATOM	1439	CD2	HIS	1026	24.085	22.445	28.090	1.00	13.13
	ATOM	1440	NE2	HIS	1026	23.205	22.180	29.104	1.00	14.95
	ATOM	1441	HE2	HIS	1026	22.964	22.754	29.859	1.00	0.00
60	ATOM	1442	N	ARG	1027	24.772	18.064	25.150	1.00	15.57
	ATOM	1443	H	ARG	1027	24.950	18.529	24.315	1.00	0.00
	ATOM	1444	CA	ARG	1027	24.062	16.743	25.147	1.00	18.90

	ATOM	1445	CB	ARG	1027	24.864	15.578	25.769	1.00	19.24
	ATOM	1446	CG	ARG	1027	26.051	15.222	24.856	1.00	23.09
	ATOM	1447	CD	ARG	1027	26.960	14.196	25.511	1.00	20.79
	ATOM	1448	NE	ARG	1027	28.178	14.020	24.702	1.00	24.03
5	ATOM	1449	HE	ARG	1027	28.192	13.388	23.950	1.00	0.00
	ATOM	1450	CZ	ARG	1027	29.260	14.742	25.014	1.00	24.19
	ATOM	1451	NH1	ARG	1027	30.287	14.485	24.244	1.00	25.21
	ATOM	1452	HH11	ARG	1027	30.198	13.810	23.514	1.00	0.00
	ATOM	1453	HH12	ARG	1027	31.150	14.970	24.381	1.00	0.00
10	ATOM	1454	NH2	ARG	1027	29.351	15.727	25.980	1.00	20.33
	ATOM	1455	HH21	ARG	1027	28.554	15.971	26.534	1.00	0.00
	ATOM	1456	HH22	ARG	1027	30.215	16.210	26.125	1.00	0.00
	ATOM	1457	C	ARG	1027	22.702	16.732	25.886	1.00	20.40
	ATOM	1458	O	ARG	1027	22.064	15.697	26.033	1.00	26.16
15	ATOM	1459	N	ASP	1028	22.275	17.820	26.527	1.00	18.68
	ATOM	1460	H	ASP	1028	22.916	18.499	26.836	1.00	0.00
	ATOM	1461	CA	ASP	1028	20.919	17.795	27.088	1.00	18.80
	ATOM	1462	CB	ASP	1028	20.928	17.298	28.557	1.00	19.67
	ATOM	1463	CG	ASP	1028	19.470	16.931	29.081	1.00	16.18
20	ATOM	1464	OD1	ASP	1028	19.354	16.528	30.229	1.00	19.57
	ATOM	1465	OD2	ASP	1028	18.455	17.030	28.408	1.00	19.03
	ATOM	1466	C	ASP	1028	20.325	19.230	27.009	1.00	17.74
	ATOM	1467	O	ASP	1028	19.687	19.770	27.943	1.00	15.48
	ATOM	1468	N	LEU	1029	20.526	19.899	25.856	1.00	14.51
25	ATOM	1469	H	LEU	1029	20.873	19.395	25.092	1.00	0.00
	ATOM	1470	CA	LEU	1029	19.989	21.289	25.785	1.00	13.59
	ATOM	1471	CB	LEU	1029	20.640	21.999	24.556	1.00	12.09
	ATOM	1472	CG	LEU	1029	20.221	23.447	24.425	1.00	10.45
	ATOM	1473	CD1	LEU	1029	20.750	24.273	25.603	1.00	13.18
30	ATOM	1474	CD2	LEU	1029	20.777	23.972	23.154	1.00	6.48
	ATOM	1475	C	LEU	1029	18.444	21.273	25.722	1.00	12.51
	ATOM	1476	O	LEU	1029	17.827	20.535	24.945	1.00	16.17
	ATOM	1477	N	ALA	1030	17.776	21.982	26.597	1.00	12.00
	ATOM	1478	H	ALA	1030	18.307	22.465	27.269	1.00	0.00
35	ATOM	1479	CA	ALA	1030	16.326	22.084	26.619	1.00	10.30
	ATOM	1480	CB	ALA	1030	15.709	20.863	27.231	1.00	8.96
	ATOM	1481	C	ALA	1030	15.938	23.265	27.522	1.00	12.32
	ATOM	1482	O	ALA	1030	16.714	23.679	28.371	1.00	12.27
	ATOM	1483	N	ALA	1031	14.744	23.832	27.422	1.00	13.33
40	ATOM	1484	H	ALA	1031	14.174	23.519	26.697	1.00	0.00
	ATOM	1485	CA	ALA	1031	14.299	24.932	28.294	1.00	14.25
	ATOM	1486	CB	ALA	1031	12.823	25.319	28.026	1.00	12.02
	ATOM	1487	C	ALA	1031	14.432	24.585	29.793	1.00	15.72
	ATOM	1488	O	ALA	1031	14.701	25.468	30.587	1.00	16.52
45	ATOM	1489	N	ARG	1032	14.191	23.318	30.237	1.00	15.44
	ATOM	1490	H	ARG	1032	13.834	22.721	29.556	1.00	0.00
	ATOM	1491	CA	ARG	1032	14.328	22.906	31.651	1.00	13.01
	ATOM	1492	CB	ARG	1032	13.880	21.454	31.815	1.00	15.20
	ATOM	1493	CG	ARG	1032	14.814	20.471	31.101	1.00	11.06
50	ATOM	1494	CD	ARG	1032	14.708	18.945	31.355	1.00	12.37
	ATOM	1495	NE	ARG	1032	14.354	18.612	29.991	1.00	24.51
	ATOM	1496	HE	ARG	1032	13.451	18.952	29.802	1.00	0.00
	ATOM	1497	CZ	ARG	1032	14.832	17.961	28.929	1.00	16.38
	ATOM	1498	NH1	ARG	1032	13.952	18.110	27.993	1.00	21.10
55	ATOM	1499	HH11	ARG	1032	13.117	18.620	28.192	1.00	0.00
	ATOM	1500	HH12	ARG	1032	14.098	17.722	27.083	1.00	0.00
	ATOM	1501	NH2	ARG	1032	15.872	17.231	28.651	1.00	17.09
	ATOM	1502	HH21	ARG	1032	16.552	17.050	29.360	1.00	0.00
	ATOM	1503	HH22	ARG	1032	15.987	16.855	27.728	1.00	0.00
60	ATOM	1504	C	ARG	1032	15.782	23.053	32.099	1.00	14.65
	ATOM	1505	O	ARG	1032	16.089	23.075	33.285	1.00	14.07
	ATOM	1506	N	ASN	1033	16.736	23.123	31.151	1.00	13.70

	ATOM	1507	H	ASN	1033	16.471	23.088	30.215	1.00	0.00
	ATOM	1508	CA	ASN	1033	18.145	23.294	31.508	1.00	13.03
	ATOM	1509	CB	ASN	1033	18.997	22.279	30.752	1.00	14.47
	ATOM	1510	CG	ASN	1033	19.042	20.980	31.542	1.00	17.02
5	ATOM	1511	OD1	ASN	1033	18.979	20.944	32.780	1.00	13.85
	ATOM	1512	ND2	ASN	1033	19.216	19.881	30.854	1.00	11.05
	ATOM	1513	HD21	ASN	1033	19.317	19.876	29.884	1.00	0.00
	ATOM	1514	HD22	ASN	1033	19.235	19.055	31.387	1.00	0.00
	ATOM	1515	C	ASN	1033	18.622	24.701	31.199	1.00	14.07
10	ATOM	1516	O	ASN	1033	19.785	24.958	30.847	1.00	15.20
	ATOM	1517	N	ILE	1034	17.729	25.651	31.378	1.00	13.60
	ATOM	1518	H	ILE	1034	16.838	25.415	31.703	1.00	0.00
	ATOM	1519	CA	ILE	1034	17.997	27.070	31.132	1.00	12.34
	ATOM	1520	CB	ILE	1034	17.264	27.758	29.854	1.00	10.21
15	ATOM	1521	CG2	ILE	1034	17.838	29.252	29.745	1.00	6.13
	ATOM	1522	CG1	ILE	1034	17.521	27.057	28.510	1.00	5.50
	ATOM	1523	CD1	ILE	1034	18.962	27.030	28.069	1.00	7.16
	ATOM	1524	C	ILE	1034	17.431	27.770	32.332	1.00	11.73
	ATOM	1525	O	ILE	1034	16.304	27.522	32.751	1.00	14.33
20	ATOM	1526	N	LEU	1035	18.260	28.568	32.939	1.00	11.59
	ATOM	1527	H	LEU	1035	19.178	28.575	32.616	1.00	0.00
	ATOM	1528	CA	LEU	1035	17.874	29.379	34.105	1.00	9.84
	ATOM	1529	CB	LEU	1035	18.972	29.275	35.195	1.00	12.34
	ATOM	1530	CG	LEU	1035	19.183	27.762	35.640	1.00	10.77
25	ATOM	1531	CD1	LEU	1035	20.510	27.639	36.291	1.00	8.47
	ATOM	1532	CD2	LEU	1035	18.004	27.270	36.518	1.00	13.80
	ATOM	1533	C	LEU	1035	17.603	30.852	33.813	1.00	12.07
	ATOM	1534	O	LEU	1035	18.276	31.525	33.049	1.00	10.12
	ATOM	1535	N	LEU	1036	16.568	31.396	34.425	1.00	12.97
30	ATOM	1536	H	LEU	1036	16.015	30.823	34.983	1.00	0.00
	ATOM	1537	CA	LEU	1036	16.271	32.809	34.282	1.00	14.34
	ATOM	1538	CB	LEU	1036	14.721	33.069	33.980	1.00	16.55
	ATOM	1539	CG	LEU	1036	14.380	34.573	33.889	1.00	14.26
	ATOM	1540	CD1	LEU	1036	15.114	35.196	32.701	1.00	10.48
35	ATOM	1541	CD2	LEU	1036	12.890	34.731	33.852	1.00	11.52
	ATOM	1542	C	LEU	1036	16.682	33.512	35.591	1.00	15.87
	ATOM	1543	O	LEU	1036	16.414	33.155	36.748	1.00	11.54
	ATOM	1544	N	SER	1037	17.546	34.456	35.344	1.00	15.63
	ATOM	1545	H	SER	1037	17.808	34.616	34.417	1.00	0.00
40	ATOM	1546	CA	SER	1037	18.039	35.288	36.411	1.00	20.83
	ATOM	1547	CB	SER	1037	19.601	35.328	36.285	1.00	20.55
	ATOM	1548	OG	SER	1037	20.154	35.992	37.403	1.00	25.42
	ATOM	1549	HG	SER	1037	21.123	35.913	37.333	1.00	0.00
	ATOM	1550	C	SER	1037	17.395	36.678	36.334	1.00	21.58
45	ATOM	1551	O	SER	1037	16.378	36.962	35.705	1.00	19.58
	ATOM	1552	N	GLU	1038	17.919	37.614	37.079	1.00	27.95
	ATOM	1553	H	GLU	1038	18.679	37.369	37.649	1.00	0.00
	ATOM	1554	CA	GLU	1038	17.390	39.000	37.052	1.00	32.87
	ATOM	1555	CB	GLU	1038	17.911	39.855	38.195	1.00	36.53
50	ATOM	1556	CG	GLU	1038	17.118	39.444	39.435	1.00	46.24
	ATOM	1557	CD	GLU	1038	18.121	39.462	40.562	1.00	51.35
	ATOM	1558	OE1	GLU	1038	19.147	38.766	40.459	1.00	55.47
	ATOM	1559	OE2	GLU	1038	17.860	40.178	41.531	1.00	55.38
	ATOM	1560	C	GLU	1038	17.816	39.723	35.796	1.00	33.53
55	ATOM	1561	O	GLU	1038	18.759	39.299	35.110	1.00	35.28
	ATOM	1562	N	LYS	1039	17.156	40.853	35.521	1.00	31.56
	ATOM	1563	H	LYS	1039	16.510	41.245	36.115	1.00	0.00
	ATOM	1564	CA	LYS	1039	17.466	41.650	34.375	1.00	29.59
	ATOM	1565	CB	LYS	1039	18.827	42.349	34.702	1.00	35.25
60	ATOM	1566	CG	LYS	1039	18.760	43.381	35.882	1.00	40.79
	ATOM	1567	CD	LYS	1039	17.831	44.649	35.672	1.00	49.90
	ATOM	1568	CE	LYS	1039	16.237	44.548	35.460	1.00	53.40



	ATOM	1569	NZ	LYS	1039	15.722	44.663	34.050	1.00	58.09
	ATOM	1570	HZ1	LYS	1039	16.295	44.072	33.416	1.00	0.00
	ATOM	1571	HZ2	LYS	1039	15.779	45.651	33.729	1.00	0.00
	ATOM	1572	HZ3	LYS	1039	14.731	44.353	33.991	1.00	0.00
5	ATOM	1573	C	LYS	1039	17.449	40.881	33.091	1.00	25.93
	ATOM	1574	O	LYS	1039	18.202	41.218	32.187	1.00	28.05
	ATOM	1575	N	ASN	1040	16.470	39.985	32.946	1.00	22.83
	ATOM	1576	H	ASN	1040	15.799	39.899	33.658	1.00	0.00
	ATOM	1577	CA	ASN	1040	16.247	39.110	31.781	1.00	21.34
10	ATOM	1578	CB	ASN	1040	15.637	39.920	30.584	1.00	23.65
	ATOM	1579	CG	ASN	1040	14.261	40.168	31.110	1.00	26.52
	ATOM	1580	OD1	ASN	1040	13.487	39.283	31.479	1.00	27.31
	ATOM	1581	ND2	ASN	1040	13.917	41.414	31.298	1.00	28.34
	ATOM	1582	HD21	ASN	1040	14.520	42.154	31.109	1.00	0.00
15	ATOM	1583	HD22	ASN	1040	13.012	41.543	31.640	1.00	0.00
	ATOM	1584	C	ASN	1040	17.460	38.348	31.283	1.00	19.37
	ATOM	1585	O	ASN	1040	17.549	37.980	30.085	1.00	20.36
	ATOM	1586	N	VAL	1041	18.389	38.062	32.230	1.00	17.37
	ATOM	1587	H	VAL	1041	18.271	38.373	33.147	1.00	0.00
20	ATOM	1588	CA	VAL	1041	19.598	37.322	31.840	1.00	15.83
	ATOM	1589	CB	VAL	1041	20.895	37.689	32.646	1.00	15.19
	ATOM	1590	CG1	VAL	1041	22.045	36.725	32.224	1.00	12.64
	ATOM	1591	CG2	VAL	1041	21.284	39.187	32.374	1.00	13.81
	ATOM	1592	C	VAL	1041	19.339	35.865	32.014	1.00	14.38
25	ATOM	1593	O	VAL	1041	18.931	35.413	33.064	1.00	17.24
	ATOM	1594	N	VAL	1042	19.424	35.146	30.905	1.00	15.52
	ATOM	1595	H	VAL	1042	19.682	35.648	30.102	1.00	0.00
	ATOM	1596	CA	VAL	1042	19.224	33.696	30.823	1.00	14.44
	ATOM	1597	CB	VAL	1042	18.342	33.627	29.513	1.00	17.91
30	ATOM	1598	CG1	VAL	1042	18.805	32.663	28.452	1.00	15.23
	ATOM	1599	CG2	VAL	1042	16.913	33.391	30.068	1.00	16.59
	ATOM	1600	C	VAL	1042	20.542	32.948	30.885	1.00	14.30
	ATOM	1601	O	VAL	1042	21.510	33.257	30.198	1.00	13.71
	ATOM	1602	N	LYS	1043	20.571	31.869	31.637	1.00	11.64
35	ATOM	1603	H	LYS	1043	19.743	31.576	32.050	1.00	0.00
	ATOM	1604	CA	LYS	1043	21.781	31.072	31.790	1.00	12.52
	ATOM	1605	CB	LYS	1043	22.235	31.120	33.250	1.00	11.38
	ATOM	1606	CG	LYS	1043	23.037	32.458	33.307	1.00	16.33
	ATOM	1607	CD	LYS	1043	23.200	32.934	34.707	1.00	17.95
40	ATOM	1608	CE	LYS	1043	23.640	34.369	34.729	1.00	21.36
	ATOM	1609	NZ	LYS	1043	25.032	34.373	34.269	1.00	21.25
	ATOM	1610	HZ1	LYS	1043	25.118	33.834	33.386	1.00	0.00
	ATOM	1611	HZ2	LYS	1043	25.605	33.908	35.003	1.00	0.00
	ATOM	1612	HZ3	LYS	1043	25.341	35.354	34.118	1.00	0.00
45	ATOM	1613	C	LYS	1043	21.713	29.618	31.391	1.00	11.57
	ATOM	1614	O	LYS	1043	20.862	28.959	31.951	1.00	12.48
	ATOM	1615	N	ILE	1044	22.585	29.063	30.519	1.00	13.34
	ATOM	1616	H	ILE	1044	23.224	29.653	30.064	1.00	0.00
	ATOM	1617	CA	ILE	1044	22.524	27.609	30.190	1.00	12.85
50	ATOM	1618	CB	ILE	1044	23.457	27.232	28.944	1.00	12.71
	ATOM	1619	CG2	ILE	1044	23.379	25.724	28.640	1.00	10.07
	ATOM	1620	CG1	ILE	1044	22.924	27.946	27.656	1.00	11.89
	ATOM	1621	CD1	ILE	1044	24.006	27.997	26.640	1.00	10.44
	ATOM	1622	C	ILE	1044	23.047	26.879	31.444	1.00	17.82
55	ATOM	1623	O	ILE	1044	23.978	27.364	32.127	1.00	17.24
	ATOM	1624	N	CYS	1045	22.459	25.712	31.769	1.00	18.26
	ATOM	1625	H	CYS	1045	21.695	25.404	31.230	1.00	0.00
	ATOM	1626	CA	CYS	1045	22.888	24.905	32.917	1.00	15.34
	ATOM	1627	CB	CYS	1045	22.120	25.322	34.175	1.00	14.89
60	ATOM	1628	SG	CYS	1045	20.447	24.713	34.292	1.00	14.01
	ATOM	1629	C	CYS	1045	22.613	23.427	32.649	1.00	14.90
	ATOM	1630	O	CYS	1045	22.159	23.021	31.576	1.00	15.25

	ATOM	1631	N	ASP	1046	22.994	22.546	33.517	1.00	13.28
	ATOM	1632	H	ASP	1046	23.441	22.858	34.319	1.00	0.00
	ATOM	1633	CA	ASP	1046	22.676	21.144	33.333	1.00	13.21
	ATOM	1634	CB	ASP	1046	23.881	20.456	32.606	1.00	13.57
5	ATOM	1635	CG	ASP	1046	23.500	19.000	32.353	1.00	12.65
	ATOM	1636	OD1	ASP	1046	24.178	18.208	32.939	1.00	21.25
	ATOM	1637	OD2	ASP	1046	22.589	18.621	31.651	1.00	14.14
	ATOM	1638	C	ASP	1046	22.352	20.547	34.722	1.00	14.27
	ATOM	1639	O	ASP	1046	23.232	20.415	35.568	1.00	14.82
10	ATOM	1640	N	PHE	1047	21.068	20.338	35.078	1.00	14.62
	ATOM	1641	H	PHE	1047	20.347	20.639	34.483	1.00	0.00
	ATOM	1642	CA	PHE	1047	20.770	19.762	36.387	1.00	15.32
	ATOM	1643	CB	PHE	1047	19.270	19.757	36.672	1.00	15.41
	ATOM	1644	CG	PHE	1047	18.779	21.141	37.080	1.00	22.06
15	ATOM	1645	CD1	PHE	1047	18.474	22.147	36.124	1.00	20.80
	ATOM	1646	CD2	PHE	1047	18.564	21.455	38.440	1.00	20.67
	ATOM	1647	CE1	PHE	1047	17.969	23.410	36.512	1.00	19.44
	ATOM	1648	CE2	PHE	1047	18.060	22.707	38.831	1.00	20.50
	ATOM	1649	CZ	PHE	1047	17.759	23.691	37.875	1.00	20.35
20	ATOM	1650	C	PHE	1047	21.317	18.351	36.504	1.00	14.42
	ATOM	1651	O	PHE	1047	21.740	17.912	37.551	1.00	16.83
	ATOM	1652	N	GLY	1048	21.374	17.569	35.439	1.00	17.98
	ATOM	1653	H	GLY	1048	20.857	17.855	34.664	1.00	0.00
	ATOM	1654	CA	GLY	1048	21.922	16.183	35.464	1.00	17.50
25	ATOM	1655	C	GLY	1048	21.366	15.248	36.584	1.00	19.10
	ATOM	1656	O	GLY	1048	20.152	14.991	36.649	1.00	18.83
	ATOM	1657	N	LEU	1049	22.305	14.797	37.473	1.00	17.99
	ATOM	1658	H	LEU	1049	23.175	15.193	37.283	1.00	0.00
	ATOM	1659	CA	LEU	1049	22.090	13.941	38.649	1.00	18.83
30	ATOM	1660	CB	LEU	1049	23.365	13.708	39.478	1.00	21.93
	ATOM	1661	CG	LEU	1049	24.249	12.460	39.231	1.00	25.95
	ATOM	1662	CD1	LEU	1049	23.930	11.765	37.868	1.00	25.79
	ATOM	1663	CD2	LEU	1049	25.710	12.931	39.438	1.00	26.28
	ATOM	1664	C	LEU	1049	21.084	14.580	39.590	1.00	20.48
35	ATOM	1665	O	LEU	1049	20.380	13.867	40.306	1.00	20.14
	ATOM	1666	N	ALA	1050	20.999	15.935	39.633	1.00	19.90
	ATOM	1667	H	ALA	1050	21.630	16.454	39.090	1.00	0.00
	ATOM	1668	CA	ALA	1050	19.977	16.669	40.476	1.00	18.14
	ATOM	1669	CB	ALA	1050	20.285	18.141	40.749	1.00	15.37
40	ATOM	1670	C	ALA	1050	18.613	16.743	39.831	1.00	17.52
	ATOM	1671	O	ALA	1050	17.853	17.684	40.067	1.00	17.19
	ATOM	1672	N	ARG	1051	18.383	15.917	38.804	1.00	16.27
	ATOM	1673	H	ARG	1051	19.103	15.344	38.468	1.00	0.00
	ATOM	1674	CA	ARG	1051	17.045	15.853	38.195	1.00	17.29
45	ATOM	1675	CB	ARG	1051	17.003	16.236	36.751	1.00	15.99
	ATOM	1676	CG	ARG	1051	15.566	16.173	36.313	1.00	14.92
	ATOM	1677	CD	ARG	1051	15.530	16.522	34.843	1.00	16.02
	ATOM	1678	NE	ARG	1051	15.686	17.982	34.688	1.00	18.74
	ATOM	1679	HE	ARG	1051	14.962	18.527	35.064	1.00	0.00
50	ATOM	1680	CZ	ARG	1051	16.703	18.673	34.115	1.00	19.42
	ATOM	1681	NH1	ARG	1051	16.609	19.987	34.079	1.00	19.30
	ATOM	1682	HH11	ARG	1051	15.776	20.359	34.462	1.00	0.00
	ATOM	1683	HH12	ARG	1051	17.307	20.607	33.702	1.00	0.00
	ATOM	1684	NH2	ARG	1051	17.830	18.189	33.634	1.00	20.36
55	ATOM	1685	HH21	ARG	1051	17.984	17.209	33.660	1.00	0.00
	ATOM	1686	HH22	ARG	1051	18.505	18.814	33.237	1.00	0.00
	ATOM	1687	C	ARG	1051	16.591	14.388	38.236	1.00	18.81
	ATOM	1688	O	ARG	1051	17.357	13.460	37.915	1.00	17.50
	ATOM	1689	N	ASP	1052	15.387	14.162	38.759	1.00	19.47
60	ATOM	1690	H	ASP	1052	14.967	14.890	39.268	1.00	0.00
	ATOM	1691	CA	ASP	1052	14.872	12.784	38.785	1.00	23.91
	ATOM	1692	CB	ASP	1052	13.684	12.741	39.740	1.00	27.71

	ATOM	1693	CG	ASP	1052	13.482	11.321	40.262	1.00	34.58
	ATOM	1694	OD1	ASP	1052	13.693	10.348	39.506	1.00	36.41
	ATOM	1695	OD2	ASP	1052	13.118	11.202	41.445	1.00	38.78
	ATOM	1696	C	ASP	1052	14.457	12.293	37.351	1.00	24.05
5	ATOM	1697	O	ASP	1052	13.262	12.194	36.995	1.00	21.30
	ATOM	1698	N	ILE	1053	15.465	11.901	36.549	1.00	22.81
	ATOM	1699	H	ILE	1053	16.394	11.999	36.852	1.00	0.00
	ATOM	1700	CA	ILE	1053	15.093	11.522	35.179	1.00	25.08
	ATOM	1701	CB	ILE	1053	16.343	11.306	34.335	1.00	24.23
10	ATOM	1702	CG2	ILE	1053	16.995	12.732	34.151	1.00	17.05
	ATOM	1703	CG1	ILE	1053	17.171	10.120	34.896	1.00	22.09
	ATOM	1704	CD1	ILE	1053	18.107	9.522	33.799	1.00	16.85
	ATOM	1705	C	ILE	1053	14.147	10.328	34.974	1.00	28.98
	ATOM	1706	O	ILE	1053	13.601	10.168	33.879	1.00	29.80
15	ATOM	1707	N	TYR	1054	13.993	9.519	36.046	1.00	29.02
	ATOM	1708	H	TYR	1054	14.595	9.739	36.779	1.00	0.00
	ATOM	1709	CA	TYR	1054	13.088	8.325	36.144	1.00	29.15
	ATOM	1710	CB	TYR	1054	13.394	7.444	37.353	1.00	32.32
	ATOM	1711	C	TYR	1054	11.651	8.707	36.313	1.00	26.81
20	ATOM	1712	O	TYR	1054	10.780	8.032	35.839	1.00	29.22
	ATOM	1713	N	LYS	1055	11.377	9.704	37.125	1.00	28.26
	ATOM	1714	H	LYS	1055	12.148	10.165	37.503	1.00	0.00
	ATOM	1715	CA	LYS	1055	10.007	10.218	37.333	1.00	29.35
	ATOM	1716	CB	LYS	1055	9.924	10.859	38.749	1.00	26.02
25	ATOM	1717	C	LYS	1055	9.666	11.296	36.207	1.00	30.26
	ATOM	1718	O	LYS	1055	8.532	11.567	35.793	1.00	29.48
	ATOM	1719	N	ASP	1056	10.707	11.994	35.702	1.00	30.51
	ATOM	1720	H	ASP	1056	11.605	11.744	35.989	1.00	0.00
	ATOM	1721	CA	ASP	1056	10.546	13.025	34.645	1.00	26.47
30	ATOM	1722	CB	ASP	1056	11.895	13.743	34.460	1.00	25.58
	ATOM	1723	CG	ASP	1056	11.776	15.075	33.775	1.00	24.81
	ATOM	1724	OD1	ASP	1056	12.624	15.897	33.990	1.00	30.77
	ATOM	1725	OD2	ASP	1056	10.888	15.317	32.993	1.00	25.77
	ATOM	1726	C	ASP	1056	10.035	12.488	33.297	1.00	25.44
35	ATOM	1727	O	ASP	1056	10.686	11.740	32.572	1.00	27.30
	ATOM	1728	N	PRO	1057	8.882	13.000	32.838	1.00	23.99
	ATOM	1729	CD	PRO	1057	8.106	14.128	33.408	1.00	20.38
	ATOM	1730	CA	PRO	1057	8.298	12.468	31.631	1.00	22.12
	ATOM	1731	CB	PRO	1057	6.933	13.051	31.638	1.00	21.61
40	ATOM	1732	CG	PRO	1057	7.056	14.387	32.377	1.00	21.32
	ATOM	1733	C	PRO	1057	9.119	12.789	30.396	1.00	24.82
	ATOM	1734	O	PRO	1057	8.954	12.145	29.357	1.00	24.42
	ATOM	1735	N	ASP	1058	9.986	13.853	30.473	1.00	23.82
	ATOM	1736	H	ASP	1058	9.978	14.344	31.313	1.00	0.00
45	ATOM	1737	CA	ASP	1058	10.853	14.282	29.314	1.00	21.28
	ATOM	1738	CB	ASP	1058	11.528	15.642	29.522	1.00	19.75
	ATOM	1739	CG	ASP	1058	10.583	16.855	29.722	1.00	22.55
	ATOM	1740	OD1	ASP	1058	11.072	17.951	30.045	1.00	22.56
	ATOM	1741	OD2	ASP	1058	9.341	16.734	29.548	1.00	23.31
50	ATOM	1742	C	ASP	1058	11.963	13.326	28.980	1.00	22.67
	ATOM	1743	O	ASP	1058	12.569	13.505	27.933	1.00	24.16
	ATOM	1744	N	TYR	1059	12.300	12.363	29.860	1.00	21.34
	ATOM	1745	H	TYR	1059	11.751	12.217	30.665	1.00	0.00
	ATOM	1746	CA	TYR	1059	13.356	11.371	29.601	1.00	20.81
55	ATOM	1747	CB	TYR	1059	14.232	11.265	30.827	1.00	19.11
	ATOM	1748	CG	TYR	1059	14.879	12.553	30.987	1.00	15.89
	ATOM	1749	CD1	TYR	1059	14.279	13.617	31.655	1.00	19.28
	ATOM	1750	CE1	TYR	1059	14.964	14.850	31.725	1.00	19.64
	ATOM	1751	CD2	TYR	1059	16.143	12.720	30.422	1.00	19.35
60	ATOM	1752	CE2	TYR	1059	16.836	13.930	30.483	1.00	18.27
	ATOM	1753	CZ	TYR	1059	16.232	15.007	31.147	1.00	20.60
	ATOM	1754	OH	TYR	1059	16.840	16.256	31.140	1.00	22.95

	ATOM	1755	HH	TYR	1059	16.355	16.843	31.728	1.00	0.00
	ATOM	1756	C	TYR	1059	12.610	10.049	29.336	1.00	24.44
	ATOM	1757	O	TYR	1059	11.732	9.643	30.099	1.00	26.74
	ATOM	1758	N	VAL	1060	12.890	9.339	28.258	1.00	23.88
5	ATOM	1759	H	VAL	1060	13.691	9.571	27.791	1.00	0.00
	ATOM	1760	CA	VAL	1060	12.194	8.100	27.834	1.00	24.97
	ATOM	1761	CB	VAL	1060	11.683	8.274	26.392	1.00	21.42
	ATOM	1762	CG1	VAL	1060	10.984	7.050	25.851	1.00	25.63
	ATOM	1763	CG2	VAL	1060	10.622	9.355	26.389	1.00	17.94
10	ATOM	1764	C	VAL	1060	13.112	6.939	27.887	1.00	25.85
	ATOM	1765	O	VAL	1060	14.279	7.059	27.539	1.00	24.87
	ATOM	1766	N	ARG	1061	12.618	5.812	28.359	1.00	28.58
	ATOM	1767	H	ARG	1061	11.680	5.790	28.635	1.00	0.00
	ATOM	1768	CA	ARG	1061	13.496	4.629	28.428	1.00	31.87
15	ATOM	1769	CB	ARG	1061	12.762	3.462	29.198	1.00	33.33
	ATOM	1770	C	ARG	1061	13.919	4.138	27.006	1.00	33.41
	ATOM	1771	O	ARG	1061	13.093	4.015	26.089	1.00	34.46
	ATOM	1772	N	LYS	1062	15.196	3.822	26.822	1.00	33.74
	ATOM	1773	H	LYS	1062	15.787	3.955	27.592	1.00	0.00
20	ATOM	1774	CA	LYS	1062	15.769	3.343	25.566	1.00	32.88
	ATOM	1775	CB	LYS	1062	16.147	4.477	24.610	1.00	29.93
	ATOM	1776	C	LYS	1062	17.046	2.617	25.969	1.00	36.22
	ATOM	1777	O	LYS	1062	18.018	3.157	26.529	1.00	38.22
	ATOM	1778	N	GLY	1063	17.057	1.303	25.740	1.00	37.33
25	ATOM	1779	H	GLY	1063	16.238	0.889	25.421	1.00	0.00
	ATOM	1780	CA	GLY	1063	18.226	0.543	26.134	1.00	36.63
	ATOM	1781	C	GLY	1063	18.219	0.688	27.616	1.00	36.78
	ATOM	1782	O	GLY	1063	17.162	0.794	28.226	1.00	35.79
	ATOM	1783	N	ASP	1064	19.358	0.667	28.244	1.00	39.92
30	ATOM	1784	H	ASP	1064	20.191	0.703	27.743	1.00	0.00
	ATOM	1785	CA	ASP	1064	19.336	0.828	29.707	1.00	43.73
	ATOM	1786	CB	ASP	1064	20.439	-0.084	30.383	1.00	49.93
	ATOM	1787	CG	ASP	1064	20.021	-1.579	30.435	1.00	56.62
	ATOM	1788	OD1	ASP	1064	18.810	-1.894	30.520	1.00	58.79
35	ATOM	1789	OD2	ASP	1064	20.938	-2.422	30.424	1.00	62.24
	ATOM	1790	C	ASP	1064	19.543	2.290	30.074	1.00	41.33
	ATOM	1791	O	ASP	1064	20.230	2.623	31.032	1.00	42.96
	ATOM	1792	N	ALA	1065	18.931	3.184	29.326	1.00	37.38
	ATOM	1793	H	ALA	1065	18.385	2.892	28.559	1.00	0.00
40	ATOM	1794	CA	ALA	1065	19.062	4.614	29.573	1.00	34.41
	ATOM	1795	CB	ALA	1065	20.003	5.176	28.533	1.00	34.21
	ATOM	1796	C	ALA	1065	17.739	5.372	29.481	1.00	34.30
	ATOM	1797	O	ALA	1065	16.788	4.920	28.842	1.00	34.83
	ATOM	1798	N	ARG	1066	17.600	6.456	30.234	1.00	32.03
45	ATOM	1799	H	ARG	1066	18.342	6.663	30.843	1.00	0.00
	ATOM	1800	CA	ARG	1066	16.406	7.336	30.160	1.00	32.47
	ATOM	1801	CB	ARG	1066	15.903	7.681	31.547	1.00	36.10
	ATOM	1802	CG	ARG	1066	14.694	6.784	31.643	1.00	41.06
	ATOM	1803	CD	ARG	1066	14.197	6.571	33.080	1.00	46.90
50	ATOM	1804	NE	ARG	1066	12.826	6.154	32.855	1.00	51.11
	ATOM	1805	HE	ARG	1066	12.600	5.200	32.900	1.00	0.00
	ATOM	1806	CZ	ARG	1066	11.869	7.056	32.555	1.00	54.52
	ATOM	1807	NH1	ARG	1066	12.017	8.381	32.470	1.00	53.44
	ATOM	1808	HH11	ARG	1066	12.906	8.810	32.629	1.00	0.00
55	ATOM	1809	HH12	ARG	1066	11.219	8.938	32.242	1.00	0.00
	ATOM	1810	NH2	ARG	1066	10.712	6.577	32.116	1.00	59.55
	ATOM	1811	HH21	ARG	1066	10.603	5.587	32.035	1.00	0.00
	ATOM	1812	HH22	ARG	1066	9.957	7.185	31.877	1.00	0.00
	ATOM	1813	C	ARG	1066	16.858	8.608	29.404	1.00	28.88
60	ATOM	1814	O	ARG	1066	17.658	9.417	29.894	1.00	24.93
	ATOM	1815	N	LEU	1067	16.417	8.712	28.158	1.00	25.36
	ATOM	1816	H	LEU	1067	15.873	7.971	27.817	1.00	0.00

	ATOM	1817	CA	LEU	1067	16.835	9.800	27.288	1.00	21.52
	ATOM	1818	CB	LEU	1067	17.323	9.121	25.979	1.00	21.29
	ATOM	1819	CG	LEU	1067	18.435	8.033	26.086	1.00	22.20
	ATOM	1820	CD1	LEU	1067	18.746	7.480	24.675	1.00	25.57
5	ATOM	1821	CD2	LEU	1067	19.718	8.576	26.702	1.00	22.27
	ATOM	1822	C	LEU	1067	15.861	10.936	26.981	1.00	19.98
	ATOM	1823	O	LEU	1067	14.663	10.744	26.937	1.00	19.57
	ATOM	1824	N	PRO	1068	16.332	12.173	26.707	1.00	18.72
	ATOM	1825	CD	PRO	1068	17.736	12.634	26.876	1.00	13.37
10	ATOM	1826	CA	PRO	1068	15.440	13.315	26.325	1.00	18.49
	ATOM	1827	CB	PRO	1068	16.237	14.582	26.690	1.00	14.24
	ATOM	1828	CG	PRO	1068	17.641	14.091	26.399	1.00	17.34
	ATOM	1829	C	PRO	1068	15.140	13.174	24.845	1.00	18.62
	ATOM	1830	O	PRO	1068	15.586	13.947	23.982	1.00	18.39
15	ATOM	1831	N	LEU	1069	14.364	12.169	24.546	1.00	19.97
	ATOM	1832	H	LEU	1069	13.958	11.653	25.277	1.00	0.00
	ATOM	1833	CA	LEU	1069	14.056	11.845	23.131	1.00	21.38
	ATOM	1834	CB	LEU	1069	13.172	10.559	23.058	1.00	25.64
	ATOM	1835	CG	LEU	1069	13.887	9.156	22.738	1.00	30.42
20	ATOM	1836	CD1	LEU	1069	15.384	9.295	22.362	1.00	32.29
	ATOM	1837	CD2	LEU	1069	14.092	8.329	23.992	1.00	34.04
	ATOM	1838	C	LEU	1069	13.407	12.940	22.331	1.00	19.16
	ATOM	1839	O	LEU	1069	13.762	13.132	21.180	1.00	18.27
	ATOM	1840	N	LYS	1070	12.503	13.743	22.874	1.00	16.68
25	ATOM	1841	H	LYS	1070	12.243	13.548	23.791	1.00	0.00
	ATOM	1842	CA	LYS	1070	11.899	14.837	22.084	1.00	13.98
	ATOM	1843	CB	LYS	1070	10.787	15.458	22.884	1.00	12.88
	ATOM	1844	CG	LYS	1070	9.681	14.478	23.006	1.00	13.74
	ATOM	1845	CD	LYS	1070	8.381	15.112	23.434	1.00	14.34
30	ATOM	1846	CE	LYS	1070	8.463	15.402	24.900	1.00	17.96
	ATOM	1847	NZ	LYS	1070	7.099	15.808	25.175	1.00	22.51
	ATOM	1848	HZ1	LYS	1070	6.455	15.075	24.817	1.00	0.00
	ATOM	1849	HZ2	LYS	1070	6.900	16.703	24.684	1.00	0.00
	ATOM	1850	HZ3	LYS	1070	6.952	15.939	26.194	1.00	0.00
35	ATOM	1851	C	LYS	1070	12.865	15.966	21.639	1.00	14.66
	ATOM	1852	O	LYS	1070	12.552	16.846	20.813	1.00	13.66
	ATOM	1853	N	TRP	1071	14.008	16.024	22.353	1.00	15.80
	ATOM	1854	H	TRP	1071	14.182	15.338	23.024	1.00	0.00
	ATOM	1855	CA	TRP	1071	15.049	17.029	22.078	1.00	15.62
40	ATOM	1856	CB	TRP	1071	15.577	17.594	23.435	1.00	11.52
	ATOM	1857	CG	TRP	1071	14.591	18.392	24.204	1.00	11.83
	ATOM	1858	CD2	TRP	1071	13.434	18.010	24.968	1.00	11.84
	ATOM	1859	CE2	TRP	1071	12.742	19.186	25.317	1.00	14.93
	ATOM	1860	CE3	TRP	1071	12.904	16.821	25.403	1.00	10.67
45	ATOM	1861	CD1	TRP	1071	14.526	19.783	24.153	1.00	14.72
	ATOM	1862	NE1	TRP	1071	13.415	20.256	24.815	1.00	14.26
	ATOM	1863	HE1	TRP	1071	13.025	21.141	24.721	1.00	0.00
	ATOM	1864	CZ2	TRP	1071	11.577	19.115	26.065	1.00	12.02
	ATOM	1865	CZ3	TRP	1071	11.749	16.742	26.133	1.00	10.87
50	ATOM	1866	CH2	TRP	1071	11.091	17.887	26.454	1.00	11.25
	ATOM	1867	C	TRP	1071	16.195	16.451	21.247	1.00	17.67
	ATOM	1868	O	TRP	1071	17.083	17.183	20.795	1.00	20.11
	ATOM	1869	N	MET	1072	16.168	15.140	21.004	1.00	15.36
	ATOM	1870	H	MET	1072	15.360	14.629	21.219	1.00	0.00
55	ATOM	1871	CA	MET	1072	17.211	14.535	20.244	1.00	16.94
	ATOM	1872	CB	MET	1072	17.416	13.125	20.798	1.00	17.87
	ATOM	1873	CG	MET	1072	18.138	13.046	22.138	1.00	18.88
	ATOM	1874	SD	MET	1072	17.770	11.425	22.918	1.00	22.37
	ATOM	1875	CE	MET	1072	19.300	10.549	22.374	1.00	11.18
60	ATOM	1876	C	MET	1072	17.126	14.489	18.735	1.00	16.60
	ATOM	1877	O	MET	1072	16.131	14.234	18.061	1.00	20.21
	ATOM	1878	N	ALA	1073	18.290	14.793	18.181	1.00	17.70

	ATOM	1879	H	ALA	1073	18.936	15.239	18.768	1.00	0.00
	ATOM	1880	CA	ALA	1073	18.508	14.752	16.725	1.00	19.07
	ATOM	1881	CB	ALA	1073	19.918	15.368	16.423	1.00	14.82
	ATOM	1882	C	ALA	1073	18.403	13.335	16.181	1.00	18.68
5	ATOM	1883	O	ALA	1073	18.850	12.373	16.811	1.00	18.85
	ATOM	1884	N	PRO	1074	17.958	13.118	14.972	1.00	21.84
	ATOM	1885	CD	PRO	1074	17.565	14.076	13.978	1.00	20.42
	ATOM	1886	CA	PRO	1074	17.863	11.709	14.455	1.00	23.55
	ATOM	1887	CB	PRO	1074	17.364	11.836	13.038	1.00	22.58
10	ATOM	1888	CG	PRO	1074	16.638	13.184	13.148	1.00	23.99
	ATOM	1889	C	PRO	1074	19.169	10.895	14.531	1.00	21.85
	ATOM	1890	O	PRO	1074	19.159	9.740	14.954	1.00	21.99
	ATOM	1891	N	GLU	1075	20.334	11.456	14.162	1.00	23.60
	ATOM	1892	H	GLU	1075	20.305	12.319	13.710	1.00	0.00
15	ATOM	1893	CA	GLU	1075	21.624	10.693	14.253	1.00	22.19
	ATOM	1894	CB	GLU	1075	22.803	11.479	13.760	1.00	20.32
	ATOM	1895	CG	GLU	1075	23.127	12.769	14.544	1.00	21.36
	ATOM	1896	CD	GLU	1075	22.431	14.040	14.069	1.00	21.75
	ATOM	1897	OE1	GLU	1075	21.488	14.002	13.279	1.00	19.07
20	ATOM	1898	OE2	GLU	1075	22.832	15.098	14.568	1.00	24.22
	ATOM	1899	C	GLU	1075	21.936	10.311	15.675	1.00	22.70
	ATOM	1900	O	GLU	1075	22.677	9.366	15.939	1.00	23.48
	ATOM	1901	N	THR	1076	21.375	11.040	16.656	1.00	23.21
	ATOM	1902	H	THR	1076	20.855	11.834	16.429	1.00	0.00
25	ATOM	1903	CA	THR	1076	21.632	10.699	18.075	1.00	23.57
	ATOM	1904	CB	THR	1076	21.383	11.786	19.166	1.00	19.45
	ATOM	1905	OG1	THR	1076	21.992	13.031	18.845	1.00	19.42
	ATOM	1906	HG1	THR	1076	22.124	13.521	19.663	1.00	0.00
	ATOM	1907	CG2	THR	1076	22.104	11.338	20.435	1.00	15.83
30	ATOM	1908	C	THR	1076	20.718	9.613	18.464	1.00	25.46
	ATOM	1909	O	THR	1076	21.115	8.707	19.183	1.00	28.41
	ATOM	1910	N	ILE	1077	19.491	9.729	18.036	1.00	24.96
	ATOM	1911	H	ILE	1077	19.213	10.492	17.489	1.00	0.00
	ATOM	1912	CA	ILE	1077	18.528	8.692	18.379	1.00	27.09
35	ATOM	1913	CB	ILE	1077	17.066	9.149	17.858	1.00	26.63
	ATOM	1914	CG2	ILE	1077	16.141	7.903	17.957	1.00	25.07
	ATOM	1915	CG1	ILE	1077	16.424	10.323	18.636	1.00	19.95
	ATOM	1916	CD1	ILE	1077	15.035	10.660	17.925	1.00	15.46
	ATOM	1917	C	ILE	1077	19.034	7.372	17.714	1.00	26.63
40	ATOM	1918	O	ILE	1077	19.262	6.357	18.366	1.00	26.84
	ATOM	1919	N	PHE	1078	19.345	7.425	16.439	1.00	25.14
	ATOM	1920	H	PHE	1078	19.220	8.263	15.973	1.00	0.00
	ATOM	1921	CA	PHE	1078	19.766	6.233	15.751	1.00	27.88
	ATOM	1922	CB	PHE	1078	19.279	6.411	14.275	1.00	32.62
45	ATOM	1923	CG	PHE	1078	17.791	6.541	14.205	1.00	36.90
	ATOM	1924	CD1	PHE	1078	17.197	7.737	13.753	1.00	39.55
	ATOM	1925	CD2	PHE	1078	16.926	5.502	14.631	1.00	41.16
	ATOM	1926	CE1	PHE	1078	15.792	7.920	13.721	1.00	37.48
	ATOM	1927	CE2	PHE	1078	15.518	5.675	14.603	1.00	40.05
50	ATOM	1928	CZ	PHE	1078	14.971	6.884	14.148	1.00	38.54
	ATOM	1929	C	PHE	1078	21.202	5.800	15.832	1.00	27.08
	ATOM	1930	O	PHE	1078	21.453	4.622	15.908	1.00	27.60
	ATOM	1931	N	ASP	1079	22.169	6.661	15.671	1.00	26.06
	ATOM	1932	H	ASP	1079	21.942	7.595	15.503	1.00	0.00
55	ATOM	1933	CA	ASP	1079	23.575	6.254	15.739	1.00	27.56
	ATOM	1934	CB	ASP	1079	24.274	6.894	14.489	1.00	32.19
	ATOM	1935	CG	ASP	1079	23.442	6.694	13.181	1.00	37.46
	ATOM	1936	OD1	ASP	1079	22.787	5.652	13.086	1.00	36.79
	ATOM	1937	OD2	ASP	1079	23.457	7.525	12.243	1.00	38.85
60	ATOM	1938	C	ASP	1079	24.316	6.600	17.079	1.00	28.48
	ATOM	1939	O	ASP	1079	25.493	6.319	17.254	1.00	27.04
	ATOM	1940	N	ARG	1080	23.606	7.153	18.072	1.00	27.11

	ATOM	1941	H	ARG	1080	22.630	7.199	17.979	1.00	0.00
	ATOM	1942	CA	ARG	1080	24.139	7.594	19.375	1.00	27.50
	ATOM	1943	CB	ARG	1080	24.623	6.403	20.204	1.00	28.96
	ATOM	1944	CG	ARG	1080	23.486	5.450	20.597	1.00	32.78
5	ATOM	1945	CD	ARG	1080	24.070	4.151	21.218	1.00	43.85
	ATOM	1946	NE	ARG	1080	25.063	3.597	20.251	1.00	54.33
	ATOM	1947	HE	ARG	1080	25.479	4.179	19.583	1.00	0.00
	ATOM	1948	CZ	ARG	1080	25.420	2.318	20.202	1.00	57.44
	ATOM	1949	NH1	ARG	1080	26.299	1.977	19.283	1.00	60.49
10	ATOM	1950	HH11	ARG	1080	26.700	2.613	18.626	1.00	0.00
	ATOM	1951	HH12	ARG	1080	26.551	1.007	19.278	1.00	0.00
	ATOM	1952	NH2	ARG	1080	24.904	1.383	21.023	1.00	59.93
	ATOM	1953	HH21	ARG	1080	24.226	1.675	21.700	1.00	0.00
	ATOM	1954	HH22	ARG	1080	25.168	0.421	20.992	1.00	0.00
15	ATOM	1955	C	ARG	1080	25.262	8.568	19.134	1.00	24.40
	ATOM	1956	O	ARG	1080	26.249	8.645	19.828	1.00	24.27
	ATOM	1957	N	VAL	1081	25.118	9.378	18.104	1.00	23.35
	ATOM	1958	H	VAL	1081	24.314	9.283	17.559	1.00	0.00
	ATOM	1959	CA	VAL	1081	26.125	10.368	17.770	1.00	23.21
20	ATOM	1960	CB	VAL	1081	26.339	10.358	16.208	1.00	23.90
	ATOM	1961	CG1	VAL	1081	26.627	11.727	15.559	1.00	19.92
	ATOM	1962	CG2	VAL	1081	27.608	9.452	15.999	1.00	22.07
	ATOM	1963	C	VAL	1081	25.776	11.778	18.295	1.00	23.54
	ATOM	1964	O	VAL	1081	24.735	12.372	17.963	1.00	22.15
25	ATOM	1965	N	TYR	1082	26.646	12.235	19.208	1.00	21.74
	ATOM	1966	H	TYR	1082	27.318	11.564	19.453	1.00	0.00
	ATOM	1967	CA	TYR	1082	26.589	13.590	19.826	1.00	22.77
	ATOM	1968	CB	TYR	1082	26.759	13.579	21.384	1.00	22.90
	ATOM	1969	CG	TYR	1082	25.692	12.820	22.079	1.00	25.39
30	ATOM	1970	CD1	TYR	1082	25.720	11.410	22.098	1.00	28.44
	ATOM	1971	CE1	TYR	1082	24.659	10.676	22.694	1.00	29.14
	ATOM	1972	CD2	TYR	1082	24.610	13.479	22.671	1.00	23.55
	ATOM	1973	CE2	TYR	1082	23.564	12.769	23.260	1.00	22.41
	ATOM	1974	CZ	TYR	1082	23.579	11.372	23.270	1.00	26.90
35	ATOM	1975	OH	TYR	1082	22.514	10.661	23.778	1.00	30.24
	ATOM	1976	HH	TYR	1082	21.928	11.269	24.218	1.00	0.00
	ATOM	1977	C	TYR	1082	27.684	14.601	19.266	1.00	24.37
	ATOM	1978	O	TYR	1082	28.915	14.394	19.337	1.00	24.38
	ATOM	1979	N	THR	1083	27.241	15.707	18.585	1.00	23.76
40	ATOM	1980	H	THR	1083	26.270	15.830	18.548	1.00	0.00
	ATOM	1981	CA	THR	1083	28.141	16.786	18.066	1.00	21.86
	ATOM	1982	CB	THR	1083	28.288	16.751	16.513	1.00	23.57
	ATOM	1983	OG1	THR	1083	27.061	17.222	15.912	1.00	23.72
	ATOM	1984	HG1	THR	1083	27.054	17.083	14.941	1.00	0.00
45	ATOM	1985	CG2	THR	1083	28.725	15.326	16.046	1.00	26.03
	ATOM	1986	C	THR	1083	27.548	18.181	18.423	1.00	18.78
	ATOM	1987	O	THR	1083	26.408	18.221	18.881	1.00	15.59
	ATOM	1988	N	ILE	1084	28.156	19.365	18.283	1.00	16.71
	ATOM	1989	H	ILE	1084	29.069	19.389	17.928	1.00	0.00
50	ATOM	1990	CA	ILE	1084	27.361	20.581	18.654	1.00	18.90
	ATOM	1991	CB	ILE	1084	28.060	22.038	18.644	1.00	22.05
	ATOM	1992	CG2	ILE	1084	28.095	22.769	20.037	1.00	15.28
	ATOM	1993	CG1	ILE	1084	29.402	21.825	17.997	1.00	25.17
	ATOM	1994	CD1	ILE	1084	29.305	21.556	16.484	1.00	26.38
55	ATOM	1995	C	ILE	1084	26.260	20.695	17.648	1.00	17.38
	ATOM	1996	O	ILE	1084	25.253	21.358	17.868	1.00	15.83
	ATOM	1997	N	GLN	1085	26.401	20.000	16.520	1.00	17.70
	ATOM	1998	H	GLN	1085	27.206	19.470	16.388	1.00	0.00
	ATOM	1999	CA	GLN	1085	25.312	20.065	15.491	1.00	18.91
60	ATOM	2000	CB	GLN	1085	25.762	19.462	14.142	1.00	18.78
	ATOM	2001	CG	GLN	1085	26.721	20.542	13.476	1.00	20.74
	ATOM	2002	CD	GLN	1085	26.266	22.037	13.610	1.00	22.47

	ATOM	2003	OE1	GLN	1085	26.884	22.836	14.325	1.00	21.93
	ATOM	2004	NE2	GLN	1085	25.232	22.502	12.900	1.00	22.20
	ATOM	2005	HE21	GLN	1085	24.716	21.950	12.273	1.00	0.00
	ATOM	2006	HE22	GLN	1085	24.990	23.442	13.028	1.00	0.00
5	ATOM	2007	C	GLN	1085	24.090	19.381	15.974	1.00	16.52
	ATOM	2008	O	GLN	1085	22.970	19.765	15.632	1.00	18.26
	ATOM	2009	N	SER	1086	24.292	18.243	16.646	1.00	17.01
	ATOM	2010	H	SER	1086	25.187	17.884	16.826	1.00	0.00
	ATOM	2011	CA	SER	1086	23.091	17.621	17.228	1.00	16.18
10	ATOM	2012	CB	SER	1086	23.338	16.148	17.786	1.00	14.38
	ATOM	2013	OG	SER	1086	24.275	15.939	18.801	1.00	16.17
	ATOM	2014	HG	SER	1086	24.247	14.994	19.025	1.00	0.00
	ATOM	2015	C	SER	1086	22.683	18.652	18.347	1.00	16.61
	ATOM	2016	O	SER	1086	21.483	18.879	18.560	1.00	15.97
15	ATOM	2017	N	ASP	1087	23.604	19.340	19.086	1.00	14.52
	ATOM	2018	H	ASP	1087	24.547	19.060	19.040	1.00	0.00
	ATOM	2019	CA	ASP	1087	23.103	20.384	20.018	1.00	14.62
	ATOM	2020	CB	ASP	1087	24.229	21.219	20.762	1.00	11.48
	ATOM	2021	CG	ASP	1087	24.799	20.469	21.959	1.00	12.91
20	ATOM	2022	OD1	ASP	1087	25.850	20.862	22.435	1.00	19.23
	ATOM	2023	OD2	ASP	1087	24.198	19.517	22.447	1.00	17.19
	ATOM	2024	C	ASP	1087	22.256	21.431	19.230	1.00	17.48
	ATOM	2025	O	ASP	1087	21.257	21.932	19.787	1.00	19.47
	ATOM	2026	N	VAL	1088	22.610	21.841	17.962	1.00	16.08
25	ATOM	2027	H	VAL	1088	23.415	21.485	17.544	1.00	0.00
	ATOM	2028	CA	VAL	1088	21.761	22.829	17.220	1.00	14.51
	ATOM	2029	CB	VAL	1088	22.379	23.224	15.866	1.00	14.37
	ATOM	2030	CG1	VAL	1088	21.398	24.062	15.066	1.00	8.75
	ATOM	2031	CG2	VAL	1088	23.589	24.149	16.116	1.00	8.08
30	ATOM	2032	C	VAL	1088	20.383	22.294	17.011	1.00	14.71
	ATOM	2033	O	VAL	1088	19.447	23.109	17.063	1.00	14.59
	ATOM	2034	N	TRP	1089	20.215	20.956	16.760	1.00	13.99
	ATOM	2035	H	TRP	1089	21.009	20.398	16.618	1.00	0.00
	ATOM	2036	CA	TRP	1089	18.837	20.393	16.657	1.00	11.59
35	ATOM	2037	CB	TRP	1089	18.952	18.881	16.353	1.00	11.21
	ATOM	2038	CG	TRP	1089	17.623	18.190	16.309	1.00	11.56
	ATOM	2039	CD2	TRP	1089	16.849	17.711	15.207	1.00	10.09
	ATOM	2040	CE2	TRP	1089	15.611	17.248	15.697	1.00	9.26
	ATOM	2041	CE3	TRP	1089	17.088	17.640	13.829	1.00	11.56
40	ATOM	2042	CD1	TRP	1089	16.779	17.971	17.424	1.00	12.86
	ATOM	2043	NE1	TRP	1089	15.570	17.426	17.039	1.00	12.10
	ATOM	2044	HE1	TRP	1089	14.892	17.112	17.684	1.00	0.00
	ATOM	2045	CZ2	TRP	1089	14.663	16.761	14.833	1.00	10.88
	ATOM	2046	CZ3	TRP	1089	16.099	17.126	12.969	1.00	10.50
45	ATOM	2047	CH2	TRP	1089	14.903	16.691	13.469	1.00	10.61
	ATOM	2048	C	TRP	1089	18.034	20.627	17.997	1.00	12.12
	ATOM	2049	O	TRP	1089	16.916	21.119	17.980	1.00	15.29
	ATOM	2050	N	SER	1090	18.588	20.303	19.201	1.00	15.20
	ATOM	2051	H	SER	1090	19.464	19.867	19.140	1.00	0.00
50	ATOM	2052	CA	SER	1090	17.965	20.475	20.566	1.00	17.83
	ATOM	2053	CB	SER	1090	18.875	20.128	21.777	1.00	19.05
	ATOM	2054	OG	SER	1090	19.368	18.785	21.708	1.00	16.80
	ATOM	2055	HG	SER	1090	19.426	18.465	22.608	1.00	0.00
	ATOM	2056	C	SER	1090	17.608	21.952	20.766	1.00	17.91
55	ATOM	2057	O	SER	1090	16.563	22.347	21.295	1.00	16.63
	ATOM	2058	N	PHE	1091	18.506	22.850	20.306	1.00	18.25
	ATOM	2059	H	PHE	1091	19.345	22.490	19.956	1.00	0.00
	ATOM	2060	CA	PHE	1091	18.302	24.321	20.334	1.00	12.73
	ATOM	2061	CB	PHE	1091	19.593	25.044	19.795	1.00	12.19
60	ATOM	2062	CG	PHE	1091	19.416	26.499	19.863	1.00	15.22
	ATOM	2063	CD1	PHE	1091	19.709	27.188	21.069	1.00	14.01
	ATOM	2064	CD2	PHE	1091	18.913	27.207	18.722	1.00	17.10



	ATOM	2065	CE1	PHE	1091	19.482	28.577	21.115	1.00	10.32
	ATOM	2066	CE2	PHE	1091	18.697	28.581	18.800	1.00	13.58
	ATOM	2067	CZ	PHE	1091	18.990	29.244	19.991	1.00	10.87
	ATOM	2068	C	PHE	1091	17.050	24.649	19.474	1.00	12.77
5	ATOM	2069	O	PHE	1091	16.241	25.480	19.894	1.00	13.31
	ATOM	2070	N	GLY	1092	16.806	24.116	18.274	1.00	8.99
	ATOM	2071	H	GLY	1092	17.505	23.556	17.865	1.00	0.00
	ATOM	2072	CA	GLY	1092	15.523	24.419	17.552	1.00	10.24
	ATOM	2073	C	GLY	1092	14.342	23.876	18.402	1.00	9.34
10	ATOM	2074	O	GLY	1092	13.208	24.382	18.429	1.00	10.83
	ATOM	2075	N	VAL	1093	14.515	22.772	19.128	1.00	10.21
	ATOM	2076	H	VAL	1093	15.362	22.279	19.099	1.00	0.00
	ATOM	2077	CA	VAL	1093	13.395	22.318	19.975	1.00	11.40
	ATOM	2078	CB	VAL	1093	13.653	20.864	20.602	1.00	14.77
15	ATOM	2079	CG1	VAL	1093	12.447	20.388	21.490	1.00	9.80
	ATOM	2080	CG2	VAL	1093	13.768	19.806	19.462	1.00	14.64
	ATOM	2081	C	VAL	1093	13.212	23.349	21.117	1.00	11.93
	ATOM	2082	O	VAL	1093	12.089	23.676	21.568	1.00	14.37
	ATOM	2083	N	LEU	1094	14.317	23.906	21.618	1.00	12.53
20	ATOM	2084	H	LEU	1094	15.170	23.593	21.261	1.00	0.00
	ATOM	2085	CA	LEU	1094	14.257	24.882	22.717	1.00	13.31
	ATOM	2086	CB	LEU	1094	15.687	25.172	23.147	1.00	12.05
	ATOM	2087	CG	LEU	1094	15.950	25.855	24.504	1.00	16.08
	ATOM	2088	CD1	LEU	1094	16.915	26.915	24.123	1.00	16.44
25	ATOM	2089	CD2	LEU	1094	14.913	26.830	25.092	1.00	19.40
	ATOM	2090	C	LEU	1094	13.509	26.137	22.211	1.00	16.37
	ATOM	2091	O	LEU	1094	12.644	26.673	22.928	1.00	18.28
	ATOM	2092	N	LEU	1095	13.809	26.597	20.978	1.00	13.21
	ATOM	2093	H	LEU	1095	14.557	26.151	20.528	1.00	0.00
30	ATOM	2094	CA	LEU	1095	13.133	27.772	20.341	1.00	15.04
	ATOM	2095	CB	LEU	1095	13.614	27.938	18.886	1.00	15.20
	ATOM	2096	CG	LEU	1095	15.019	28.467	18.677	1.00	16.50
	ATOM	2097	CD1	LEU	1095	15.304	28.509	17.140	1.00	15.08
	ATOM	2098	CD2	LEU	1095	15.150	29.832	19.344	1.00	13.08
35	ATOM	2099	C	LEU	1095	11.630	27.474	20.323	1.00	15.20
	ATOM	2100	O	LEU	1095	10.793	28.293	20.725	1.00	13.91
	ATOM	2101	N	TRP	1096	11.270	26.240	19.850	1.00	14.00
	ATOM	2102	H	TRP	1096	11.956	25.637	19.475	1.00	0.00
	ATOM	2103	CA	TRP	1096	9.857	25.823	19.856	1.00	13.63
40	ATOM	2104	CB	TRP	1096	9.658	24.338	19.420	1.00	11.90
	ATOM	2105	CG	TRP	1096	8.198	24.046	19.170	1.00	14.13
	ATOM	2106	CD2	TRP	1096	7.252	23.627	20.137	1.00	14.10
	ATOM	2107	CE2	TRP	1096	5.991	23.463	19.443	1.00	13.99
	ATOM	2108	CE3	TRP	1096	7.394	23.327	21.528	1.00	15.07
45	ATOM	2109	CD1	TRP	1096	7.436	24.150	17.941	1.00	14.08
	ATOM	2110	NE1	TRP	1096	6.142	23.771	18.097	1.00	10.60
	ATOM	2111	HE1	TRP	1096	5.438	23.837	17.410	1.00	0.00
	ATOM	2112	CZ2	TRP	1096	4.888	23.006	20.227	1.00	16.17
	ATOM	2113	CZ3	TRP	1096	6.281	22.902	22.241	1.00	14.56
50	ATOM	2114	CH2	TRP	1096	5.030	22.738	21.613	1.00	14.16
	ATOM	2115	C	TRP	1096	9.335	25.952	21.338	1.00	14.07
	ATOM	2116	O	TRP	1096	8.234	26.481	21.553	1.00	17.28
	ATOM	2117	N	GLU	1097	10.079	25.479	22.384	1.00	12.66
	ATOM	2118	H	GLU	1097	10.915	25.020	22.173	1.00	0.00
55	ATOM	2119	CA	GLU	1097	9.624	25.639	23.791	1.00	12.86
	ATOM	2120	CB	GLU	1097	10.622	24.968	24.781	1.00	10.84
	ATOM	2121	CG	GLU	1097	10.592	23.453	24.631	1.00	11.95
	ATOM	2122	CD	GLU	1097	11.576	22.932	25.655	1.00	15.90
	ATOM	2123	OE1	GLU	1097	11.168	22.521	26.755	1.00	16.96
60	ATOM	2124	OE2	GLU	1097	12.756	22.959	25.356	1.00	12.11
	ATOM	2125	C	GLU	1097	9.419	27.111	24.241	1.00	12.63
	ATOM	2126	O	GLU	1097	8.474	27.489	24.934	1.00	11.38

	ATOM	2127	N	ILE	1098	10.320	27.986	23.816	1.00	12.74
	ATOM	2128	H	ILE	1098	11.033	27.658	23.230	1.00	0.00
	ATOM	2129	CA	ILE	1098	10.211	29.391	24.167	1.00	12.52
	ATOM	2130	CB	ILE	1098	11.533	30.065	23.775	1.00	13.95
5	ATOM	2131	CG2	ILE	1098	11.222	31.584	23.724	1.00	13.20
	ATOM	2132	CG1	ILE	1098	12.680	29.556	24.634	1.00	10.22
	ATOM	2133	CD1	ILE	1098	14.056	30.062	24.152	1.00	12.21
	ATOM	2134	C	ILE	1098	9.027	30.027	23.461	1.00	14.43
	ATOM	2135	O	ILE	1098	8.196	30.709	24.101	1.00	15.21
10	ATOM	2136	N	PHE	1099	8.919	29.830	22.119	1.00	11.42
	ATOM	2137	H	PHE	1099	9.598	29.293	21.673	1.00	0.00
	ATOM	2138	CA	PHE	1099	7.817	30.468	21.419	1.00	11.95
	ATOM	2139	CB	PHE	1099	8.251	30.695	19.975	1.00	16.00
	ATOM	2140	CG	PHE	1099	9.353	31.680	19.974	1.00	13.92
15	ATOM	2141	CD1	PHE	1099	10.653	31.275	20.218	1.00	12.17
	ATOM	2142	CD2	PHE	1099	9.055	33.017	19.721	1.00	14.65
	ATOM	2143	CE1	PHE	1099	11.672	32.221	20.202	1.00	14.43
	ATOM	2144	CE2	PHE	1099	10.092	33.968	19.696	1.00	18.96
	ATOM	2145	CZ	PHE	1099	11.421	33.563	19.942	1.00	13.07
20	ATOM	2146	C	PHE	1099	6.492	29.801	21.500	1.00	14.19
	ATOM	2147	O	PHE	1099	5.558	30.095	20.765	1.00	16.64
	ATOM	2148	N	SER	1100	6.327	28.833	22.384	1.00	13.41
	ATOM	2149	H	SER	1100	7.146	28.453	22.758	1.00	0.00
	ATOM	2150	CA	SER	1100	5.033	28.160	22.690	1.00	12.04
25	ATOM	2151	CB	SER	1100	5.112	26.630	22.535	1.00	13.80
	ATOM	2152	OG	SER	1100	6.010	26.121	23.530	1.00	15.15
	ATOM	2153	HG	SER	1100	6.203	25.196	23.323	1.00	0.00
	ATOM	2154	C	SER	1100	4.727	28.471	24.180	1.00	12.57
	ATOM	2155	O	SER	1100	3.679	28.173	24.725	1.00	13.35
30	ATOM	2156	N	LEU	1101	5.606	29.199	24.863	1.00	13.95
	ATOM	2157	H	LEU	1101	6.359	29.548	24.347	1.00	0.00
	ATOM	2158	CA	LEU	1101	5.587	29.606	26.292	1.00	16.11
	ATOM	2159	CB	LEU	1101	4.386	30.603	26.683	1.00	15.50
	ATOM	2160	CG	LEU	1101	4.474	32.042	25.977	1.00	19.92
35	ATOM	2161	CD1	LEU	1101	3.347	33.042	26.469	1.00	15.10
	ATOM	2162	CD2	LEU	1101	5.919	32.605	26.217	1.00	18.71
	ATOM	2163	C	LEU	1101	5.578	28.414	27.227	1.00	18.97
	ATOM	2164	O	LEU	1101	4.656	28.121	27.993	1.00	19.74
	ATOM	2165	N	GLY	1102	6.713	27.663	27.154	1.00	18.82
40	ATOM	2166	H	GLY	1102	7.391	27.915	26.497	1.00	0.00
	ATOM	2167	CA	GLY	1102	6.932	26.468	28.008	1.00	18.72
	ATOM	2168	C	GLY	1102	6.060	25.273	27.663	1.00	19.72
	ATOM	2169	O	GLY	1102	5.789	24.427	28.499	1.00	20.31
	ATOM	2170	N	ALA	1103	5.520	25.170	26.446	1.00	20.13
45	ATOM	2171	H	ALA	1103	5.634	25.909	25.814	1.00	0.00
	ATOM	2172	CA	ALA	1103	4.753	23.968	26.112	1.00	17.88
	ATOM	2173	CB	ALA	1103	3.914	24.102	24.817	1.00	15.91
	ATOM	2174	C	ALA	1103	5.683	22.772	25.888	1.00	17.89
	ATOM	2175	O	ALA	1103	6.872	22.884	25.632	1.00	17.17
50	ATOM	2176	N	SER	1104	5.123	21.574	26.052	1.00	18.52
	ATOM	2177	H	SER	1104	4.188	21.630	26.299	1.00	0.00
	ATOM	2178	CA	SER	1104	5.819	20.278	25.842	1.00	18.30
	ATOM	2179	CB	SER	1104	5.039	19.039	26.382	1.00	20.13
	ATOM	2180	OG	SER	1104	5.919	17.975	26.780	1.00	26.13
55	ATOM	2181	HG	SER	1104	5.431	17.142	26.836	1.00	0.00
	ATOM	2182	C	SER	1104	5.946	20.001	24.365	1.00	17.20
	ATOM	2183	O	SER	1104	4.934	19.967	23.643	1.00	17.08
	ATOM	2184	N	PRO	1105	7.130	19.713	23.863	1.00	16.63
	ATOM	2185	CD	PRO	1105	8.411	19.593	24.570	1.00	14.02
60	ATOM	2186	CA	PRO	1105	7.273	19.451	22.425	1.00	14.80
	ATOM	2187	CB	PRO	1105	8.748	19.151	22.205	1.00	14.42
	ATOM	2188	CG	PRO	1105	9.319	19.938	23.358	1.00	15.62

	ATOM	2189	C	PRO	1105	6.413	18.299	21.922	1.00	18.18
	ATOM	2190	O	PRO	1105	6.012	17.404	22.652	1.00	20.08
	ATOM	2191	N	TYR	1106	6.234	18.214	20.605	1.00	17.66
	ATOM	2192	H	TYR	1106	6.677	18.911	20.078	1.00	0.00
5	ATOM	2193	CA	TYR	1106	5.452	17.162	19.948	1.00	17.71
	ATOM	2194	CB	TYR	1106	6.269	15.851	19.891	1.00	15.59
	ATOM	2195	CG	TYR	1106	7.450	16.069	19.057	1.00	16.76
	ATOM	2196	CD1	TYR	1106	8.667	16.343	19.669	1.00	14.87
	ATOM	2197	CE1	TYR	1106	9.808	16.602	18.904	1.00	15.24
10	ATOM	2198	CD2	TYR	1106	7.356	16.043	17.668	1.00	17.07
	ATOM	2199	CE2	TYR	1106	8.507	16.296	16.883	1.00	14.93
	ATOM	2200	CZ	TYR	1106	9.752	16.584	17.484	1.00	15.79
	ATOM	2201	OH	TYR	1106	10.888	16.901	16.734	1.00	13.47
	ATOM	2202	HH	TYR	1106	11.377	17.612	17.157	1.00	0.00
15	ATOM	2203	C	TYR	1106	4.110	16.918	20.657	1.00	20.65
	ATOM	2204	O	TYR	1106	3.807	15.811	21.116	1.00	20.19
	ATOM	2205	N	PRO	1107	3.272	17.966	20.727	1.00	20.84
	ATOM	2206	CD	PRO	1107	3.478	19.332	20.192	1.00	20.44
	ATOM	2207	CA	PRO	1107	1.956	17.857	21.314	1.00	23.78
20	ATOM	2208	CB	PRO	1107	1.327	19.173	21.039	1.00	22.40
	ATOM	2209	CG	PRO	1107	2.092	19.738	19.819	1.00	22.72
	ATOM	2210	C	PRO	1107	1.135	16.706	20.690	1.00	29.57
	ATOM	2211	O	PRO	1107	1.040	16.592	19.437	1.00	28.41
	ATOM	2212	N	GLY	1108	0.577	15.846	21.587	1.00	31.62
25	ATOM	2213	H	GLY	1108	0.774	16.007	22.533	1.00	0.00
	ATOM	2214	CA	GLY	1108	-0.281	14.668	21.170	1.00	37.14
	ATOM	2215	C	GLY	1108	0.394	13.287	20.910	1.00	38.69
	ATOM	2216	O	GLY	1108	-0.053	12.219	21.349	1.00	41.30
	ATOM	2217	N	VAL	1109	1.545	13.392	20.238	1.00	37.52
30	ATOM	2218	H	VAL	1109	1.850	14.319	20.167	1.00	0.00
	ATOM	2219	CA	VAL	1109	2.446	12.337	19.787	1.00	32.09
	ATOM	2220	CB	VAL	1109	3.571	13.054	19.036	1.00	31.43
	ATOM	2221	CG1	VAL	1109	4.241	11.935	18.306	1.00	35.34
	ATOM	2222	CG2	VAL	1109	3.143	14.224	18.074	1.00	28.01
35	ATOM	2223	C	VAL	1109	2.981	11.439	20.894	1.00	31.16
	ATOM	2224	O	VAL	1109	3.392	11.886	21.960	1.00	32.64
	ATOM	2225	N	LYS	1110	2.832	10.116	20.755	1.00	30.62
	ATOM	2226	H	LYS	1110	2.316	9.806	19.986	1.00	0.00
	ATOM	2227	CA	LYS	1110	3.398	9.190	21.774	1.00	30.39
40	ATOM	2228	CB	LYS	1110	2.734	7.716	21.786	1.00	30.14
	ATOM	2229	C	LYS	1110	4.864	9.059	21.362	1.00	30.79
	ATOM	2230	O	LYS	1110	5.205	9.133	20.170	1.00	32.22
	ATOM	2231	N	ILE	1111	5.812	8.927	22.278	1.00	32.17
	ATOM	2232	H	ILE	1111	5.568	8.951	23.226	1.00	0.00
45	ATOM	2233	CA	ILE	1111	7.230	8.804	21.851	1.00	29.12
	ATOM	2234	CB	ILE	1111	8.038	9.732	22.801	1.00	23.72
	ATOM	2235	CG2	ILE	1111	9.561	9.795	22.505	1.00	22.60
	ATOM	2236	CG1	ILE	1111	7.384	11.118	22.642	1.00	20.16
	ATOM	2237	CD1	ILE	1111	7.209	11.715	21.242	1.00	21.61
50	ATOM	2238	C	ILE	1111	7.694	7.319	21.809	1.00	31.35
	ATOM	2239	O	ILE	1111	8.185	6.663	22.746	1.00	31.59
	ATOM	2240	N	ASP	1112	7.432	6.806	20.605	1.00	31.61
	ATOM	2241	H	ASP	1112	7.060	7.463	19.983	1.00	0.00
	ATOM	2242	CA	ASP	1112	7.676	5.421	20.161	1.00	35.69
55	ATOM	2243	CB	ASP	1112	6.259	4.753	19.870	1.00	38.63
	ATOM	2244	CG	ASP	1112	5.449	5.354	18.699	1.00	40.37
	ATOM	2245	OD1	ASP	1112	4.306	4.954	18.439	1.00	48.79
	ATOM	2246	OD2	ASP	1112	5.940	6.223	18.005	1.00	42.10
	ATOM	2247	C	ASP	1112	8.616	5.230	18.949	1.00	36.56
60	ATOM	2248	O	ASP	1112	9.204	6.210	18.471	1.00	35.62
	ATOM	2249	N	GLU	1113	8.760	3.969	18.424	1.00	36.93
	ATOM	2250	H	GLU	1113	8.364	3.242	18.941	1.00	0.00

	ATOM	2251	CA	GLU	1113	9.622	3.669	17.237	1.00	36.90
	ATOM	2252	CB	GLU	1113	9.772	2.125	16.946	1.00	38.25
	ATOM	2253	C	GLU	1113	9.018	4.344	15.997	1.00	35.95
	ATOM	2254	O	GLU	1113	9.732	4.749	15.069	1.00	36.13
5	ATOM	2255	N	GLU	1114	7.690	4.519	15.975	1.00	34.50
	ATOM	2256	H	GLU	1114	7.155	4.088	16.671	1.00	0.00
	ATOM	2257	CA	GLU	1114	7.058	5.253	14.834	1.00	34.65
	ATOM	2258	CB	GLU	1114	5.547	4.930	14.888	1.00	40.80
	ATOM	2259	CG	GLU	1114	5.492	3.392	14.549	1.00	50.03
10	ATOM	2260	CD	GLU	1114	6.325	3.063	13.267	1.00	54.57
	ATOM	2261	OE1	GLU	1114	7.308	2.290	13.334	1.00	54.49
	ATOM	2262	OE2	GLU	1114	5.972	3.612	12.210	1.00	55.11
	ATOM	2263	C	GLU	1114	7.356	6.769	14.848	1.00	30.99
	ATOM	2264	O	GLU	1114	7.628	7.421	13.851	1.00	27.97
15	ATOM	2265	N	PHE	1115	7.407	7.365	16.036	1.00	30.23
	ATOM	2266	H	PHE	1115	7.429	6.808	16.828	1.00	0.00
	ATOM	2267	CA	PHE	1115	7.756	8.786	16.209	1.00	27.81
	ATOM	2268	CB	PHE	1115	7.628	9.112	17.692	1.00	25.50
	ATOM	2269	CG	PHE	1115	8.537	10.210	18.107	1.00	26.18
20	ATOM	2270	CD1	PHE	1115	9.815	9.933	18.622	1.00	24.22
	ATOM	2271	CD2	PHE	1115	8.139	11.539	17.923	1.00	23.71
	ATOM	2272	CE1	PHE	1115	10.700	10.973	18.942	1.00	24.88
	ATOM	2273	CE2	PHE	1115	9.045	12.568	18.249	1.00	24.43
	ATOM	2274	CZ	PHE	1115	10.318	12.303	18.752	1.00	23.12
25	ATOM	2275	C	PHE	1115	9.181	8.871	15.704	1.00	27.12
	ATOM	2276	O	PHE	1115	9.485	9.631	14.788	1.00	28.47
	ATOM	2277	N	CYS	1116	10.084	8.001	16.142	1.00	27.10
	ATOM	2278	H	CYS	1116	9.851	7.365	16.850	1.00	0.00
	ATOM	2279	CA	CYS	1116	11.461	8.126	15.631	1.00	30.15
30	ATOM	2280	CB	CYS	1116	12.380	7.150	16.329	1.00	29.68
	ATOM	2281	SG	CYS	1116	12.500	7.297	18.146	1.00	37.39
	ATOM	2282	C	CYS	1116	11.610	7.918	14.122	1.00	32.08
	ATOM	2283	O	CYS	1116	12.364	8.631	13.418	1.00	30.84
	ATOM	2284	N	ARG	1117	10.901	6.905	13.573	1.00	34.49
35	ATOM	2285	H	ARG	1117	10.328	6.354	14.148	1.00	0.00
	ATOM	2286	CA	ARG	1117	10.981	6.624	12.106	1.00	36.29
	ATOM	2287	CB	ARG	1117	10.066	5.363	11.854	1.00	38.80
	ATOM	2288	CG	ARG	1117	9.691	4.777	10.452	1.00	43.19
	ATOM	2289	CD	ARG	1117	8.120	4.529	10.251	1.00	45.38
40	ATOM	2290	NE	ARG	1117	7.363	5.297	9.185	1.00	45.12
	ATOM	2291	HE	ARG	1117	7.792	5.408	8.312	1.00	0.00
	ATOM	2292	CZ	ARG	1117	6.123	5.868	9.341	1.00	49.21
	ATOM	2293	NH1	ARG	1117	5.494	6.533	8.327	1.00	49.58
	ATOM	2294	HH11	ARG	1117	5.922	6.621	7.427	1.00	0.00
45	ATOM	2295	HH12	ARG	1117	4.590	6.932	8.483	1.00	0.00
	ATOM	2296	NH2	ARG	1117	5.484	5.838	10.529	1.00	49.83
	ATOM	2297	HH21	ARG	1117	5.927	5.412	11.316	1.00	0.00
	ATOM	2298	HH22	ARG	1117	4.574	6.241	10.621	1.00	0.00
	ATOM	2299	C	ARG	1117	10.561	7.895	11.302	1.00	37.60
50	ATOM	2300	O	ARG	1117	11.305	8.411	10.435	1.00	38.84
	ATOM	2301	N	ARG	1118	9.413	8.495	11.699	1.00	35.70
	ATOM	2302	H	ARG	1118	8.958	8.100	12.478	1.00	0.00
	ATOM	2303	CA	ARG	1118	8.805	9.724	11.090	1.00	33.46
	ATOM	2304	CB	ARG	1118	7.534	10.061	11.886	1.00	36.16
55	ATOM	2305	CG	ARG	1118	6.285	9.621	11.144	1.00	40.88
	ATOM	2306	CD	ARG	1118	5.245	9.085	12.133	1.00	49.93
	ATOM	2307	NE	ARG	1118	4.917	10.065	13.197	1.00	56.22
	ATOM	2308	HE	ARG	1118	4.839	11.011	12.951	1.00	0.00
	ATOM	2309	CZ	ARG	1118	4.680	9.730	14.476	1.00	57.65
60	ATOM	2310	NH1	ARG	1118	4.395	10.727	15.280	1.00	60.21
	ATOM	2311	HH11	ARG	1118	4.361	11.661	14.925	1.00	0.00
	ATOM	2312	HH12	ARG	1118	4.212	10.547	16.246	1.00	0.00

	ATOM	2313	NH2	ARG	1118	4.728	8.487	14.993	1.00	61.32
	ATOM	2314	HH21	ARG	1118	4.956	7.702	14.415	1.00	0.00
	ATOM	2315	HH22	ARG	1118	4.534	8.349	15.965	1.00	0.00
	ATOM	2316	C	ARG	1118	9.743	10.936	11.046	1.00	30.71
5	ATOM	2317	O	ARG	1118	9.928	11.695	10.080	1.00	26.20
	ATOM	2318	N	LEU	1119	10.347	11.121	12.185	1.00	29.43
	ATOM	2319	H	LEU	1119	10.105	10.562	12.958	1.00	0.00
	ATOM	2320	CA	LEU	1119	11.329	12.192	12.322	1.00	30.49
	ATOM	2321	CB	LEU	1119	11.801	12.090	13.752	1.00	28.84
10	ATOM	2322	CG	LEU	1119	12.497	13.329	14.212	1.00	28.84
	ATOM	2323	CD1	LEU	1119	11.326	14.294	14.567	1.00	28.60
	ATOM	2324	CD2	LEU	1119	13.621	12.991	15.281	1.00	28.62
	ATOM	2325	C	LEU	1119	12.493	12.002	11.287	1.00	30.90
	ATOM	2326	O	LEU	1119	13.013	12.910	10.617	1.00	28.45
15	ATOM	2327	N	LYS	1120	13.030	10.784	11.231	1.00	33.33
	ATOM	2328	H	LYS	1120	12.742	10.077	11.856	1.00	0.00
	ATOM	2329	CA	LYS	1120	14.113	10.558	10.228	1.00	37.65
	ATOM	2330	CB	LYS	1120	14.700	9.081	10.318	1.00	39.42
	ATOM	2331	CG	LYS	1120	16.118	8.914	9.686	1.00	40.91
20	ATOM	2332	CD	LYS	1120	16.833	7.544	9.952	1.00	44.41
	ATOM	2333	CE	LYS	1120	18.345	7.359	9.458	1.00	47.43
	ATOM	2334	NZ	LYS	1120	19.393	7.208	10.526	1.00	48.22
	ATOM	2335	HZ1	LYS	1120	19.089	6.482	11.208	1.00	0.00
	ATOM	2336	HZ2	LYS	1120	19.544	8.103	11.033	1.00	0.00
25	ATOM	2337	HZ3	LYS	1120	20.290	6.900	10.097	1.00	0.00
	ATOM	2338	C	LYS	1120	13.554	10.810	8.806	1.00	36.20
	ATOM	2339	O	LYS	1120	14.306	11.126	7.878	1.00	37.44
	ATOM	2340	N	GLU	1121	12.245	10.601	8.587	1.00	36.63
	ATOM	2341	H	GLU	1121	11.689	10.181	9.276	1.00	0.00
30	ATOM	2342	CA	GLU	1121	11.744	10.880	7.222	1.00	39.38
	ATOM	2343	CB	GLU	1121	10.598	9.906	6.822	1.00	41.61
	ATOM	2344	CG	GLU	1121	9.322	10.047	7.617	1.00	48.48
	ATOM	2345	CD	GLU	1121	8.848	8.652	7.901	1.00	51.14
	ATOM	2346	OE1	GLU	1121	7.645	8.411	7.718	1.00	54.04
35	ATOM	2347	OE2	GLU	1121	9.693	7.840	8.298	1.00	52.47
	ATOM	2348	C	GLU	1121	11.282	12.305	6.912	1.00	37.69
	ATOM	2349	O	GLU	1121	10.715	12.577	5.829	1.00	37.53
	ATOM	2350	N	GLY	1122	11.582	13.244	7.855	1.00	36.25
	ATOM	2351	H	GLY	1122	12.094	12.954	8.640	1.00	0.00
40	ATOM	2352	CA	GLY	1122	11.242	14.688	7.657	1.00	31.49
	ATOM	2353	C	GLY	1122	10.130	15.294	8.464	1.00	27.70
	ATOM	2354	O	GLY	1122	9.837	16.467	8.332	1.00	25.99
	ATOM	2355	N	THR	1123	9.415	14.487	9.202	1.00	28.69
	ATOM	2356	H	THR	1123	9.607	13.522	9.162	1.00	0.00
45	ATOM	2357	CA	THR	1123	8.347	15.021	10.064	1.00	31.94
	ATOM	2358	CB	THR	1123	7.525	13.879	10.788	1.00	33.61
	ATOM	2359	OG1	THR	1123	7.031	12.947	9.809	1.00	37.66
	ATOM	2360	HG1	THR	1123	6.569	12.226	10.250	1.00	0.00
	ATOM	2361	CG2	THR	1123	6.305	14.463	11.552	1.00	33.08
50	ATOM	2362	C	THR	1123	8.961	15.952	11.160	1.00	31.41
	ATOM	2363	O	THR	1123	9.875	15.626	11.938	1.00	30.58
	ATOM	2364	N	ARG	1124	8.345	17.140	11.271	1.00	28.62
	ATOM	2365	H	ARG	1124	7.554	17.238	10.708	1.00	0.00
	ATOM	2366	CA	ARG	1124	8.712	18.247	12.192	1.00	24.77
55	ATOM	2367	CB	ARG	1124	9.431	19.297	11.390	1.00	20.62
	ATOM	2368	CG	ARG	1124	10.603	18.777	10.618	1.00	20.53
	ATOM	2369	CD	ARG	1124	11.627	18.220	11.581	1.00	18.03
	ATOM	2370	NE	ARG	1124	12.860	17.909	10.897	1.00	18.83
	ATOM	2371	HE	ARG	1124	13.485	18.641	10.738	1.00	0.00
60	ATOM	2372	CZ	ARG	1124	13.150	16.714	10.441	1.00	16.63
	ATOM	2373	NH1	ARG	1124	12.347	15.674	10.519	1.00	18.66
	ATOM	2374	HH11	ARG	1124	11.457	15.795	10.945	1.00	0.00

	ATOM	2375	HH12	ARG	1124	12.646	14.803	10.151	1.00	0.00
	ATOM	2376	NH2	ARG	1124	14.381	16.521	10.009	1.00	17.03
	ATOM	2377	HH21	ARG	1124	15.040	17.264	10.039	1.00	0.00
	ATOM	2378	HH22	ARG	1124	14.672	15.628	9.637	1.00	0.00
5	ATOM	2379	C	ARG	1124	7.512	18.926	12.877	1.00	22.00
	ATOM	2380	O	ARG	1124	6.418	18.935	12.334	1.00	23.78
	ATOM	2381	N	MET	1125	7.649	19.468	14.053	1.00	17.13
	ATOM	2382	H	MET	1125	8.461	19.285	14.564	1.00	0.00
	ATOM	2383	CA	MET	1125	6.571	20.190	14.705	1.00	14.36
10	ATOM	2384	CB	MET	1125	6.987	20.833	16.021	1.00	16.33
	ATOM	2385	CG	MET	1125	6.945	19.829	17.160	1.00	16.47
	ATOM	2386	SD	MET	1125	7.490	20.440	18.739	1.00	16.74
	ATOM	2387	CE	MET	1125	9.307	20.415	18.668	1.00	11.39
	ATOM	2388	C	MET	1125	6.113	21.354	13.857	1.00	15.64
15	ATOM	2389	O	MET	1125	6.773	21.897	12.993	1.00	13.43
	ATOM	2390	N	ARG	1126	4.848	21.689	14.124	1.00	16.28
	ATOM	2391	H	ARG	1126	4.349	21.120	14.737	1.00	0.00
	ATOM	2392	CA	ARG	1126	4.212	22.883	13.487	1.00	19.97
	ATOM	2393	CB	ARG	1126	2.672	22.685	13.438	1.00	17.23
20	ATOM	2394	C	ARG	1126	4.600	24.125	14.354	1.00	18.69
	ATOM	2395	O	ARG	1126	5.285	24.055	15.379	1.00	20.62
	ATOM	2396	N	ALA	1127	4.282	25.301	13.861	1.00	19.38
	ATOM	2397	H	ALA	1127	3.815	25.302	12.994	1.00	0.00
	ATOM	2398	CA	ALA	1127	4.602	26.573	14.514	1.00	18.43
25	ATOM	2399	CB	ALA	1127	4.093	27.797	13.727	1.00	13.49
	ATOM	2400	C	ALA	1127	3.998	26.672	15.876	1.00	18.55
	ATOM	2401	O	ALA	1127	2.778	26.516	16.034	1.00	21.08
	ATOM	2402	N	PRO	1128	4.848	27.020	16.856	1.00	15.18
	ATOM	2403	CD	PRO	1128	6.292	27.255	16.827	1.00	10.83
30	ATOM	2404	CA	PRO	1128	4.263	27.356	18.126	1.00	14.56
	ATOM	2405	CB	PRO	1128	5.565	27.512	18.974	1.00	10.81
	ATOM	2406	CG	PRO	1128	6.563	28.092	18.086	1.00	7.63
	ATOM	2407	C	PRO	1128	3.284	28.577	18.024	1.00	14.54
	ATOM	2408	O	PRO	1128	3.289	29.421	17.140	1.00	12.35
35	ATOM	2409	N	ASP	1129	2.415	28.756	18.986	1.00	16.63
	ATOM	2410	H	ASP	1129	2.413	28.039	19.657	1.00	0.00
	ATOM	2411	CA	ASP	1129	1.433	29.908	19.006	1.00	19.14
	ATOM	2412	CB	ASP	1129	0.448	29.801	20.265	1.00	16.34
	ATOM	2413	CG	ASP	1129	-0.561	28.677	20.145	1.00	18.57
40	ATOM	2414	OD1	ASP	1129	-1.198	28.320	21.135	1.00	19.19
	ATOM	2415	OD2	ASP	1129	-0.733	28.152	19.046	1.00	24.04
	ATOM	2416	C	ASP	1129	1.967	31.351	19.005	1.00	18.36
	ATOM	2417	O	ASP	1129	1.315	32.270	18.549	1.00	17.16
	ATOM	2418	N	TYR	1130	3.145	31.583	19.552	1.00	18.26
45	ATOM	2419	H	TYR	1130	3.647	30.827	19.927	1.00	0.00
	ATOM	2420	CA	TYR	1130	3.718	32.937	19.706	1.00	16.09
	ATOM	2421	CB	TYR	1130	4.085	33.032	21.223	1.00	13.96
	ATOM	2422	CG	TYR	1130	3.035	32.500	22.132	1.00	12.83
	ATOM	2423	CD1	TYR	1130	3.092	31.207	22.727	1.00	12.72
50	ATOM	2424	CE1	TYR	1130	2.050	30.782	23.596	1.00	11.93
	ATOM	2425	CD2	TYR	1130	1.950	33.354	22.401	1.00	11.56
	ATOM	2426	CE2	TYR	1130	0.934	32.937	23.244	1.00	12.83
	ATOM	2427	CZ	TYR	1130	0.989	31.671	23.843	1.00	11.75
	ATOM	2428	OH	TYR	1130	-0.082	31.326	24.631	1.00	15.40
55	ATOM	2429	HH	TYR	1130	-0.626	32.107	24.784	1.00	0.00
	ATOM	2430	C	TYR	1130	4.920	33.226	18.796	1.00	16.57
	ATOM	2431	O	TYR	1130	5.683	34.184	18.914	1.00	16.17
	ATOM	2432	N	THR	1131	5.215	32.237	17.993	1.00	15.58
	ATOM	2433	H	THR	1131	4.648	31.444	18.029	1.00	0.00
60	ATOM	2434	CA	THR	1131	6.315	32.314	17.062	1.00	16.07
	ATOM	2435	CB	THR	1131	6.464	30.985	16.248	1.00	17.09
	ATOM	2436	OG1	THR	1131	7.716	31.079	15.634	1.00	19.72

	ATOM	2437	HG1	THR	1131	7.911	30.258	15.178	1.00	0.00
	ATOM	2438	CG2	THR	1131	5.528	30.771	14.988	1.00	16.73
	ATOM	2439	C	THR	1131	6.174	33.402	16.037	1.00	19.30
	ATOM	2440	O	THR	1131	5.088	33.885	15.736	1.00	19.44
5	ATOM	2441	N	THR	1132	7.288	33.830	15.480	1.00	20.53
	ATOM	2442	H	THR	1132	8.121	33.450	15.817	1.00	0.00
	ATOM	2443	CA	THR	1132	7.264	34.779	14.339	1.00	21.31
	ATOM	2444	CB	THR	1132	8.379	35.785	14.304	1.00	21.97
	ATOM	2445	OG1	THR	1132	9.696	35.100	14.335	1.00	21.19
10	ATOM	2446	HG1	THR	1132	10.309	35.532	14.954	1.00	0.00
	ATOM	2447	CG2	THR	1132	8.053	36.841	15.405	1.00	21.23
	ATOM	2448	C	THR	1132	7.534	33.918	13.132	1.00	21.31
	ATOM	2449	O	THR	1132	8.161	32.868	13.264	1.00	23.62
	ATOM	2450	N	PRO	1133	7.152	34.274	11.910	1.00	21.52
15	ATOM	2451	CD	PRO	1133	6.347	35.465	11.451	1.00	23.15
	ATOM	2452	CA	PRO	1133	7.537	33.434	10.759	1.00	20.55
	ATOM	2453	CB	PRO	1133	7.086	34.228	9.499	1.00	21.59
	ATOM	2454	CG	PRO	1133	5.882	35.016	10.061	1.00	23.03
	ATOM	2455	C	PRO	1133	8.999	33.098	10.714	1.00	18.40
20	ATOM	2456	O	PRO	1133	9.392	31.973	10.495	1.00	17.07
	ATOM	2457	N	GLU	1134	9.871	34.072	10.931	1.00	19.10
	ATOM	2458	H	GLU	1134	9.498	34.953	11.098	1.00	0.00
	ATOM	2459	CA	GLU	1134	11.315	33.793	10.844	1.00	21.85
	ATOM	2460	CB	GLU	1134	12.149	35.088	10.756	1.00	24.04
25	ATOM	2461	CG	GLU	1134	11.530	36.344	11.332	1.00	32.68
	ATOM	2462	CD	GLU	1134	10.356	37.064	10.671	1.00	34.12
	ATOM	2463	OE1	GLU	1134	9.439	37.468	11.379	1.00	38.75
	ATOM	2464	OE2	GLU	1134	10.385	37.332	9.475	1.00	40.37
	ATOM	2465	C	GLU	1134	11.827	32.947	11.934	1.00	19.77
30	ATOM	2466	O	GLU	1134	12.782	32.186	11.743	1.00	18.37
	ATOM	2467	N	MET	1135	11.179	33.059	13.086	1.00	20.19
	ATOM	2468	H	MET	1135	10.433	33.680	13.197	1.00	0.00
	ATOM	2469	CA	MET	1135	11.573	32.181	14.175	1.00	18.62
	ATOM	2470	CB	MET	1135	10.917	32.613	15.511	1.00	18.20
35	ATOM	2471	CG	MET	1135	11.672	33.780	16.264	1.00	24.38
	ATOM	2472	SD	MET	1135	13.511	33.684	16.615	1.00	27.46
	ATOM	2473	CE	MET	1135	13.700	31.959	16.776	1.00	21.30
	ATOM	2474	C	MET	1135	11.150	30.728	13.809	1.00	18.52
	ATOM	2475	O	MET	1135	11.906	29.768	13.996	1.00	20.46
40	ATOM	2476	N	TYR	1136	9.997	30.481	13.181	1.00	16.89
	ATOM	2477	H	TYR	1136	9.401	31.243	13.011	1.00	0.00
	ATOM	2478	CA	TYR	1136	9.612	29.118	12.842	1.00	13.96
	ATOM	2479	CB	TYR	1136	8.151	29.167	12.364	1.00	15.09
	ATOM	2480	CG	TYR	1136	7.771	27.750	12.199	1.00	18.32
45	ATOM	2481	CD1	TYR	1136	7.999	26.737	13.164	1.00	14.02
	ATOM	2482	CE1	TYR	1136	7.648	25.400	12.902	1.00	15.33
	ATOM	2483	CD2	TYR	1136	7.174	27.435	10.971	1.00	19.19
	ATOM	2484	CE2	TYR	1136	6.811	26.089	10.699	1.00	16.36
	ATOM	2485	CZ	TYR	1136	7.056	25.094	11.664	1.00	14.57
50	ATOM	2486	OH	TYR	1136	6.678	23.828	11.375	1.00	17.48
	ATOM	2487	HH	TYR	1136	6.918	23.367	12.165	1.00	0.00
	ATOM	2488	C	TYR	1136	10.547	28.522	11.807	1.00	15.81
	ATOM	2489	O	TYR	1136	10.945	27.361	11.766	1.00	15.10
	ATOM	2490	N	GLN	1137	10.915	29.325	10.866	1.00	16.99
55	ATOM	2491	H	GLN	1137	10.549	30.233	10.854	1.00	0.00
	ATOM	2492	CA	GLN	1137	11.829	28.859	9.840	1.00	16.88
	ATOM	2493	CB	GLN	1137	11.937	29.943	8.790	1.00	19.46
	ATOM	2494	CG	GLN	1137	12.920	29.407	7.670	1.00	23.56
	ATOM	2495	CD	GLN	1137	12.417	28.138	7.007	1.00	22.02
60	ATOM	2496	OE1	GLN	1137	11.309	28.168	6.474	1.00	24.56
	ATOM	2497	NE2	GLN	1137	13.170	27.033	7.030	1.00	19.32
	ATOM	2498	HE21	GLN	1137	14.039	27.019	7.461	1.00	0.00

	ATOM	2499	HE22	GLN	1137	12.819	26.230	6.588	1.00	0.00
	ATOM	2500	C	GLN	1137	13.187	28.545	10.455	1.00	15.26
	ATOM	2501	O	GLN	1137	13.966	27.728	9.996	1.00	12.87
	ATOM	2502	N	THR	1138	13.577	29.300	11.483	1.00	15.59
5	ATOM	2503	H	THR	1138	13.094	30.123	11.711	1.00	0.00
	ATOM	2504	CA	THR	1138	14.869	29.008	12.105	1.00	15.31
	ATOM	2505	CB	THR	1138	15.221	30.148	13.089	1.00	15.17
	ATOM	2506	OG1	THR	1138	15.494	31.349	12.338	1.00	15.62
	ATOM	2507	HG1	THR	1138	15.605	32.077	12.951	1.00	0.00
10	ATOM	2508	CG2	THR	1138	16.450	29.834	13.907	1.00	12.25
	ATOM	2509	C	THR	1138	14.787	27.630	12.779	1.00	17.14
	ATOM	2510	O	THR	1138	15.699	26.814	12.665	1.00	21.42
	ATOM	2511	N	MET	1139	13.703	27.308	13.461	1.00	15.38
	ATOM	2512	H	MET	1139	13.025	28.001	13.574	1.00	0.00
15	ATOM	2513	CA	MET	1139	13.512	25.984	14.077	1.00	14.79
	ATOM	2514	CB	MET	1139	12.120	25.909	14.649	1.00	14.35
	ATOM	2515	CG	MET	1139	11.830	26.904	15.784	1.00	10.89
	ATOM	2516	SD	MET	1139	10.132	26.836	16.364	1.00	14.97
	ATOM	2517	CE	MET	1139	10.067	28.530	17.053	1.00	7.31
20	ATOM	2518	C	MET	1139	13.662	24.930	12.969	1.00	15.20
	ATOM	2519	O	MET	1139	14.434	23.984	13.095	1.00	16.89
	ATOM	2520	N	LEU	1140	12.957	25.043	11.837	1.00	17.38
	ATOM	2521	H	LEU	1140	12.285	25.753	11.786	1.00	0.00
	ATOM	2522	CA	LEU	1140	13.149	24.083	10.707	1.00	15.15
25	ATOM	2523	CB	LEU	1140	12.197	24.464	9.573	1.00	16.23
	ATOM	2524	CG	LEU	1140	10.648	24.534	9.867	1.00	18.39
	ATOM	2525	CD1	LEU	1140	9.881	25.126	8.622	1.00	16.89
	ATOM	2526	CD2	LEU	1140	10.112	23.128	10.164	1.00	17.26
	ATOM	2527	C	LEU	1140	14.631	24.081	10.201	1.00	16.04
30	ATOM	2528	O	LEU	1140	15.174	23.037	9.859	1.00	16.04
	ATOM	2529	N	ASP	1141	15.374	25.195	10.142	1.00	15.59
	ATOM	2530	H	ASP	1141	14.946	26.042	10.387	1.00	0.00
	ATOM	2531	CA	ASP	1141	16.780	25.139	9.717	1.00	15.51
	ATOM	2532	CB	ASP	1141	17.370	26.538	9.765	1.00	16.33
35	ATOM	2533	CG	ASP	1141	16.756	27.475	8.750	1.00	18.70
	ATOM	2534	OD1	ASP	1141	16.959	28.656	8.885	1.00	19.18
	ATOM	2535	OD2	ASP	1141	16.086	27.067	7.819	1.00	22.21
	ATOM	2536	C	ASP	1141	17.585	24.232	10.664	1.00	19.01
	ATOM	2537	O	ASP	1141	18.410	23.353	10.364	1.00	20.85
40	ATOM	2538	N	CYS	1142	17.373	24.495	11.949	1.00	19.78
	ATOM	2539	H	CYS	1142	16.741	25.213	12.169	1.00	0.00
	ATOM	2540	CA	CYS	1142	18.033	23.745	13.048	1.00	18.18
	ATOM	2541	CB	CYS	1142	17.579	24.296	14.452	1.00	20.47
	ATOM	2542	SG	CYS	1142	18.112	25.988	14.909	1.00	15.64
45	ATOM	2543	C	CYS	1142	17.634	22.276	12.952	1.00	17.82
	ATOM	2544	O	CYS	1142	18.373	21.373	13.353	1.00	13.88
	ATOM	2545	N	TRP	1143	16.386	22.013	12.529	1.00	17.39
	ATOM	2546	H	TRP	1143	15.739	22.725	12.344	1.00	0.00
	ATOM	2547	CA	TRP	1143	16.050	20.593	12.395	1.00	19.18
50	ATOM	2548	CB	TRP	1143	14.592	20.407	12.789	1.00	17.63
	ATOM	2549	CG	TRP	1143	14.251	20.973	14.129	1.00	19.30
	ATOM	2550	CD2	TRP	1143	12.961	21.497	14.459	1.00	18.44
	ATOM	2551	CE2	TRP	1143	12.958	21.639	15.899	1.00	17.01
	ATOM	2552	CE3	TRP	1143	11.792	21.806	13.677	1.00	15.52
55	ATOM	2553	CD1	TRP	1143	14.959	20.870	15.350	1.00	14.80
	ATOM	2554	NE1	TRP	1143	14.208	21.238	16.403	1.00	16.74
	ATOM	2555	HE1	TRP	1143	14.498	21.159	17.337	1.00	0.00
	ATOM	2556	CZ2	TRP	1143	11.743	22.143	16.497	1.00	15.27
	ATOM	2557	CZ3	TRP	1143	10.622	22.321	14.295	1.00	12.55
60	ATOM	2558	CH2	TRP	1143	10.607	22.457	15.698	1.00	14.07
	ATOM	2559	C	TRP	1143	16.338	19.947	10.975	1.00	22.67
	ATOM	2560	O	TRP	1143	15.739	18.941	10.540	1.00	25.77



	ATOM	2561	N	HIS	1144	17.281	20.528	10.210	1.00	20.00
	ATOM	2562	H	HIS	1144	17.709	21.330	10.559	1.00	0.00
	ATOM	2563	CA	HIS	1144	17.676	19.959	8.935	1.00	19.52
	ATOM	2564	C	HIS	1144	18.098	18.435	9.111	1.00	22.18
5	ATOM	2565	O	HIS	1144	18.842	18.134	10.041	1.00	21.16
	ATOM	2566	CB	HIS	1144	18.844	20.815	8.455	1.00	18.01
	ATOM	2567	CG	HIS	1144	19.080	20.424	7.112	1.00	18.66
	ATOM	2568	ND1	HIS	1144	18.648	21.053	6.030	1.00	20.15
	ATOM	2569	HD1	HIS	1144	18.291	21.960	5.984	1.00	0.00
10	ATOM	2570	CD2	HIS	1144	19.591	19.235	6.711	1.00	18.51
	ATOM	2571	NE2	HIS	1144	19.463	19.130	5.412	1.00	21.04
	ATOM	2572	CE1	HIS	1144	18.875	20.248	4.962	1.00	19.84
	ATOM	2573	N	GLY	1145	17.632	17.435	8.302	1.00	21.94
	ATOM	2574	H	GLY	1145	16.877	17.721	7.738	1.00	0.00
15	ATOM	2575	CA	GLY	1145	18.033	16.018	8.378	1.00	21.04
	ATOM	2576	C	GLY	1145	19.570	15.892	8.503	1.00	23.68
	ATOM	2577	O	GLY	1145	20.084	15.045	9.227	1.00	24.29
	ATOM	2578	N	GLU	1146	20.338	16.685	7.713	1.00	26.59
	ATOM	2579	H	GLU	1146	19.820	17.062	6.984	1.00	0.00
20	ATOM	2580	CA	GLU	1146	21.835	16.781	7.667	1.00	27.26
	ATOM	2581	CB	GLU	1146	22.358	17.306	6.335	1.00	32.00
	ATOM	2582	CG	GLU	1146	22.760	16.284	5.331	1.00	43.96
	ATOM	2583	CD	GLU	1146	21.507	15.960	4.541	1.00	54.90
	ATOM	2584	OE1	GLU	1146	20.605	15.286	5.097	1.00	58.81
25	ATOM	2585	OE2	GLU	1146	21.449	16.396	3.365	1.00	59.51
	ATOM	2586	C	GLU	1146	22.595	17.655	8.692	1.00	23.69
	ATOM	2587	O	GLU	1146	22.658	18.871	8.553	1.00	23.40
	ATOM	2588	N	PRO	1147	23.327	17.073	9.633	1.00	21.25
	ATOM	2589	CD	PRO	1147	23.535	15.631	9.841	1.00	18.71
30	ATOM	2590	CA	PRO	1147	23.920	17.836	10.711	1.00	20.73
	ATOM	2591	CB	PRO	1147	24.826	16.825	11.426	1.00	17.05
	ATOM	2592	CG	PRO	1147	24.023	15.566	11.274	1.00	16.94
	ATOM	2593	C	PRO	1147	24.642	19.050	10.206	1.00	22.74
	ATOM	2594	O	PRO	1147	24.542	20.206	10.659	1.00	20.77
35	ATOM	2595	N	SER	1148	25.420	18.728	9.173	1.00	25.97
	ATOM	2596	H	SER	1148	25.384	17.798	8.860	1.00	0.00
	ATOM	2597	CA	SER	1148	26.284	19.727	8.499	1.00	26.35
	ATOM	2598	CB	SER	1148	27.237	19.080	7.486	1.00	26.07
	ATOM	2599	OG	SER	1148	26.463	18.696	6.339	1.00	36.27
40	ATOM	2600	HG	SER	1148	27.026	18.188	5.739	1.00	0.00
	ATOM	2601	C	SER	1148	25.476	20.780	7.781	1.00	25.01
	ATOM	2602	O	SER	1148	26.002	21.847	7.508	1.00	25.74
	ATOM	2603	N	GLN	1149	24.236	20.512	7.400	1.00	24.25
	ATOM	2604	H	GLN	1149	23.949	19.586	7.428	1.00	0.00
45	ATOM	2605	CA	GLN	1149	23.428	21.550	6.750	1.00	24.40
	ATOM	2606	CB	GLN	1149	22.347	21.001	5.847	1.00	27.07
	ATOM	2607	CG	GLN	1149	22.982	20.231	4.707	1.00	32.73
	ATOM	2608	CD	GLN	1149	23.399	21.257	3.741	1.00	33.98
	ATOM	2609	OE1	GLN	1149	22.680	21.643	2.808	1.00	33.42
50	ATOM	2610	NE2	GLN	1149	24.611	21.732	3.958	1.00	36.71
	ATOM	2611	HE21	GLN	1149	25.183	21.440	4.683	1.00	0.00
	ATOM	2612	HE22	GLN	1149	24.883	22.423	3.317	1.00	0.00
	ATOM	2613	C	GLN	1149	22.717	22.355	7.775	1.00	24.19
	ATOM	2614	O	GLN	1149	21.964	23.244	7.381	1.00	24.66
55	ATOM	2615	N	ARG	1150	22.742	21.956	9.054	1.00	23.60
	ATOM	2616	H	ARG	1150	23.236	21.155	9.321	1.00	0.00
	ATOM	2617	CA	ARG	1150	22.057	22.799	10.082	1.00	21.42
	ATOM	2618	CB	ARG	1150	21.872	22.053	11.427	1.00	21.61
	ATOM	2619	CG	ARG	1150	20.747	21.033	11.485	1.00	21.83
60	ATOM	2620	CD	ARG	1150	20.969	20.044	12.643	1.00	18.56
	ATOM	2621	NE	ARG	1150	20.339	18.769	12.268	1.00	17.92
	ATOM	2622	HE	ARG	1150	19.572	18.793	11.668	1.00	0.00

	ATOM	2623	CZ	ARG	1150	20.659	17.606	12.845	1.00	16.10
	ATOM	2624	NH1	ARG	1150	21.557	17.580	13.841	1.00	16.06
	ATOM	2625	HH11	ARG	1150	21.995	18.419	14.151	1.00	0.00
	ATOM	2626	HH12	ARG	1150	21.775	16.716	14.277	1.00	0.00
5	ATOM	2627	NH2	ARG	1150	20.213	16.463	12.285	1.00	13.42
	ATOM	2628	HH21	ARG	1150	19.665	16.487	11.452	1.00	0.00
	ATOM	2629	HH22	ARG	1150	20.438	15.590	12.707	1.00	0.00
	ATOM	2630	C	ARG	1150	22.969	24.026	10.348	1.00	19.08
	ATOM	2631	O	ARG	1150	24.190	24.043	10.093	1.00	17.27
10	ATOM	2632	N	PRO	1151	22.372	25.146	10.810	1.00	17.32
	ATOM	2633	CD	PRO	1151	20.945	25.466	10.797	1.00	12.13
	ATOM	2634	CA	PRO	1151	23.196	26.297	11.214	1.00	16.48
	ATOM	2635	CB	PRO	1151	22.212	27.450	11.579	1.00	14.64
	ATOM	2636	CG	PRO	1151	20.880	26.650	11.774	1.00	11.90
15	ATOM	2637	C	PRO	1151	24.108	26.004	12.350	1.00	15.32
	ATOM	2638	O	PRO	1151	23.899	25.098	13.148	1.00	15.15
	ATOM	2639	N	THR	1152	25.172	26.765	12.400	1.00	16.47
	ATOM	2640	H	THR	1152	25.335	27.411	11.696	1.00	0.00
	ATOM	2641	CA	THR	1152	26.116	26.627	13.508	1.00	14.67
20	ATOM	2642	CB	THR	1152	27.529	27.066	13.193	1.00	12.31
	ATOM	2643	OG1	THR	1152	27.455	28.407	12.695	1.00	12.00
	ATOM	2644	HG1	THR	1152	28.289	28.535	12.202	1.00	0.00
	ATOM	2645	CG2	THR	1152	28.213	26.179	12.200	1.00	7.71
	ATOM	2646	C	THR	1152	25.621	27.633	14.535	1.00	14.97
25	ATOM	2647	O	THR	1152	24.848	28.501	14.168	1.00	17.85
	ATOM	2648	N	PHE	1153	26.046	27.603	15.800	1.00	15.54
	ATOM	2649	H	PHE	1153	26.730	26.943	16.054	1.00	0.00
	ATOM	2650	CA	PHE	1153	25.606	28.613	16.804	1.00	17.00
	ATOM	2651	CB	PHE	1153	26.069	28.217	18.258	1.00	14.51
30	ATOM	2652	CG	PHE	1153	25.211	27.096	18.786	1.00	15.81
	ATOM	2653	CD1	PHE	1153	23.840	27.349	19.015	1.00	10.75
	ATOM	2654	CD2	PHE	1153	25.782	25.772	18.957	1.00	11.09
	ATOM	2655	CE1	PHE	1153	23.039	26.268	19.403	1.00	11.98
	ATOM	2656	CE2	PHE	1153	24.936	24.731	19.351	1.00	9.16
35	ATOM	2657	CZ	PHE	1153	23.581	24.977	19.570	1.00	8.97
	ATOM	2658	C	PHE	1153	26.165	29.966	16.423	1.00	14.16
	ATOM	2659	O	PHE	1153	25.521	30.945	16.680	1.00	15.63
	ATOM	2660	N	SER	1154	27.320	30.114	15.800	1.00	14.92
	ATOM	2661	H	SER	1154	27.895	29.338	15.792	1.00	0.00
40	ATOM	2662	CA	SER	1154	27.736	31.486	15.375	1.00	14.27
	ATOM	2663	CB	SER	1154	29.044	31.464	14.746	1.00	14.85
	ATOM	2664	OG	SER	1154	29.893	31.042	15.750	1.00	13.56
	ATOM	2665	HG	SER	1154	30.801	30.970	15.428	1.00	0.00
	ATOM	2666	C	SER	1154	26.795	32.115	14.361	1.00	14.52
45	ATOM	2667	O	SER	1154	26.594	33.336	14.257	1.00	15.87
	ATOM	2668	N	GLU	1155	26.300	31.269	13.473	1.00	15.13
	ATOM	2669	H	GLU	1155	26.596	30.332	13.454	1.00	0.00
	ATOM	2670	CA	GLU	1155	25.276	31.693	12.478	1.00	17.25
	ATOM	2671	CB	GLU	1155	24.930	30.591	11.512	1.00	19.41
50	ATOM	2672	CG	GLU	1155	26.145	30.385	10.623	1.00	25.47
	ATOM	2673	CD	GLU	1155	25.622	29.339	9.734	1.00	30.50
	ATOM	2674	OE1	GLU	1155	26.032	28.190	9.920	1.00	31.07
	ATOM	2675	OE2	GLU	1155	24.760	29.711	8.915	1.00	37.89
	ATOM	2676	C	GLU	1155	23.972	32.053	13.159	1.00	16.18
55	ATOM	2677	O	GLU	1155	23.263	32.907	12.695	1.00	17.16
	ATOM	2678	N	LEU	1156	23.516	31.239	14.128	1.00	16.34
	ATOM	2679	H	LEU	1156	23.987	30.393	14.261	1.00	0.00
	ATOM	2680	CA	LEU	1156	22.304	31.541	14.911	1.00	16.18
	ATOM	2681	CB	LEU	1156	21.961	30.337	15.845	1.00	13.12
60	ATOM	2682	CG	LEU	1156	21.474	29.032	15.136	1.00	8.09
	ATOM	2683	CD1	LEU	1156	21.652	27.786	16.030	1.00	8.53
	ATOM	2684	CD2	LEU	1156	20.043	29.287	14.708	1.00	8.89

	ATOM	2685	C	LEU	1156	22.480	32.851	15.740	1.00	15.95
	ATOM	2686	O	LEU	1156	21.508	33.576	15.882	1.00	16.98
	ATOM	2687	N	VAL	1157	23.632	33.188	16.369	1.00	15.59
	ATOM	2688	H	VAL	1157	24.329	32.506	16.404	1.00	0.00
5	ATOM	2689	CA	VAL	1157	23.822	34.492	17.100	1.00	14.43
	ATOM	2690	CB	VAL	1157	25.221	34.480	17.735	1.00	13.22
	ATOM	2691	CG1	VAL	1157	25.615	35.884	18.221	1.00	12.88
	ATOM	2692	CG2	VAL	1157	25.235	33.484	18.884	1.00	10.65
	ATOM	2693	C	VAL	1157	23.673	35.653	16.112	1.00	15.13
10	ATOM	2694	O	VAL	1157	22.988	36.641	16.347	1.00	16.47
	ATOM	2695	N	GLU	1158	24.323	35.552	14.934	1.00	17.34
	ATOM	2696	H	GLU	1158	24.933	34.797	14.822	1.00	0.00
	ATOM	2697	CA	GLU	1158	24.190	36.600	13.867	1.00	19.28
	ATOM	2698	CB	GLU	1158	24.998	36.219	12.575	1.00	18.27
15	ATOM	2699	CG	GLU	1158	25.111	37.309	11.454	1.00	24.47
	ATOM	2700	CD	GLU	1158	26.067	36.946	10.254	1.00	26.69
	ATOM	2701	OE1	GLU	1158	26.798	35.940	10.251	1.00	30.34
	ATOM	2702	OE2	GLU	1158	26.092	37.701	9.283	1.00	29.62
	ATOM	2703	C	GLU	1158	22.716	36.764	13.480	1.00	17.63
20	ATOM	2704	O	GLU	1158	22.091	37.784	13.691	1.00	19.03
	ATOM	2705	N	HIS	1159	22.084	35.696	13.031	1.00	16.20
	ATOM	2706	H	HIS	1159	22.596	34.865	12.881	1.00	0.00
	ATOM	2707	CA	HIS	1159	20.689	35.696	12.636	1.00	14.60
	ATOM	2708	C	HIS	1159	19.789	36.188	13.768	1.00	15.35
25	ATOM	2709	O	HIS	1159	18.924	37.071	13.622	1.00	14.49
	ATOM	2710	CB	HIS	1159	20.323	34.278	12.240	1.00	13.01
	ATOM	2711	CG	HIS	1159	19.014	34.354	11.648	1.00	17.91
	ATOM	2712	ND1	HIS	1159	17.979	33.488	11.949	1.00	22.96
	ATOM	2713	HD1	HIS	1159	18.056	32.663	12.464	1.00	0.00
30	ATOM	2714	CD2	HIS	1159	18.557	35.211	10.628	1.00	16.00
	ATOM	2715	NE2	HIS	1159	17.256	34.848	10.348	1.00	17.03
	ATOM	2716	CE1	HIS	1159	16.872	33.806	11.146	1.00	17.18
	ATOM	2717	N	LEU	1160	19.907	35.542	14.897	1.00	13.31
	ATOM	2718	H	LEU	1160	20.518	34.792	14.963	1.00	0.00
35	ATOM	2719	CA	LEU	1160	19.085	35.991	16.006	1.00	16.11
	ATOM	2720	CB	LEU	1160	19.311	35.075	17.251	1.00	16.34
	ATOM	2721	CG	LEU	1160	18.622	33.689	17.024	1.00	18.24
	ATOM	2722	CD1	LEU	1160	19.072	32.711	18.077	1.00	18.44
	ATOM	2723	CD2	LEU	1160	17.109	33.835	17.055	1.00	20.73
40	ATOM	2724	C	LEU	1160	19.346	37.457	16.339	1.00	18.55
	ATOM	2725	O	LEU	1160	18.396	38.168	16.648	1.00	20.49
	ATOM	2726	N	GLY	1161	20.580	37.976	16.312	1.00	19.84
	ATOM	2727	H	GLY	1161	21.312	37.400	16.023	1.00	0.00
	ATOM	2728	CA	GLY	1161	20.863	39.385	16.614	1.00	18.37
45	ATOM	2729	C	GLY	1161	20.155	40.241	15.612	1.00	17.78
	ATOM	2730	O	GLY	1161	19.671	41.292	15.960	1.00	15.80
	ATOM	2731	N	ASN	1162	20.057	39.838	14.351	1.00	18.13
	ATOM	2732	H	ASN	1162	20.570	39.042	14.104	1.00	0.00
	ATOM	2733	CA	ASN	1162	19.352	40.634	13.295	1.00	19.21
50	ATOM	2734	CB	ASN	1162	19.550	40.094	11.843	1.00	15.14
	ATOM	2735	CG	ASN	1162	20.989	40.177	11.399	1.00	19.35
	ATOM	2736	OD1	ASN	1162	21.817	40.972	11.842	1.00	23.33
	ATOM	2737	ND2	ASN	1162	21.422	39.362	10.451	1.00	21.29
	ATOM	2738	HD21	ASN	1162	20.890	38.702	9.992	1.00	0.00
55	ATOM	2739	HD22	ASN	1162	22.371	39.478	10.224	1.00	0.00
	ATOM	2740	C	ASN	1162	17.866	40.625	13.536	1.00	20.19
	ATOM	2741	O	ASN	1162	17.167	41.598	13.241	1.00	22.01
	ATOM	2742	N	LEU	1163	17.295	39.471	13.953	1.00	20.95
	ATOM	2743	H	LEU	1163	17.857	38.669	14.014	1.00	0.00
60	ATOM	2744	CA	LEU	1163	15.831	39.404	14.271	1.00	19.69
	ATOM	2745	CB	LEU	1163	15.390	37.947	14.590	1.00	19.49
	ATOM	2746	CG	LEU	1163	14.869	37.122	13.466	1.00	20.62

	ATOM	2747	CD1	LEU	1163	15.446	37.558	12.130	1.00	24.13
	ATOM	2748	CD2	LEU	1163	15.096	35.685	13.860	1.00	24.67
	ATOM	2749	C	LEU	1163	15.567	40.291	15.516	1.00	22.07
	ATOM	2750	O	LEU	1163	14.601	41.019	15.675	1.00	21.23
5	ATOM	2751	N	LEU	1164	16.445	40.290	16.496	1.00	23.74
	ATOM	2752	H	LEU	1164	17.184	39.654	16.447	1.00	0.00
	ATOM	2753	CA	LEU	1164	16.220	41.147	17.689	1.00	26.17
	ATOM	2754	CB	LEU	1164	17.342	40.917	18.584	1.00	22.57
	ATOM	2755	CG	LEU	1164	17.031	41.192	19.990	1.00	25.46
10	ATOM	2756	CD1	LEU	1164	15.684	40.781	20.519	1.00	20.21
	ATOM	2757	CD2	LEU	1164	18.146	40.368	20.661	1.00	29.71
	ATOM	2758	C	LEU	1164	16.149	42.609	17.305	1.00	28.67
	ATOM	2759	O	LEU	1164	15.414	43.406	17.879	1.00	29.89
	ATOM	2760	N	GLN	1165	17.067	42.978	16.411	1.00	30.02
15	ATOM	2761	H	GLN	1165	17.734	42.318	16.158	1.00	0.00
	ATOM	2762	CA	GLN	1165	17.182	44.325	15.869	1.00	31.77
	ATOM	2763	CB	GLN	1165	18.418	44.424	14.914	1.00	34.55
	ATOM	2764	CG	GLN	1165	19.493	45.400	15.354	1.00	36.09
	ATOM	2765	CD	GLN	1165	18.783	46.641	15.924	1.00	41.02
20	ATOM	2766	OE1	GLN	1165	18.740	46.954	17.114	1.00	42.70
	ATOM	2767	NE2	GLN	1165	18.126	47.464	15.134	1.00	36.43
	ATOM	2768	HE21	GLN	1165	18.051	47.350	14.178	1.00	0.00
	ATOM	2769	HE22	GLN	1165	17.709	48.194	15.634	1.00	0.00
	ATOM	2770	C	GLN	1165	15.903	44.663	15.127	1.00	33.32
25	ATOM	2771	O	GLN	1165	15.556	45.836	14.951	1.00	34.83
	ATOM	2772	N	ALA	1166	15.302	43.648	14.531	1.00	34.66
	ATOM	2773	H	ALA	1166	15.632	42.736	14.597	1.00	0.00
	ATOM	2774	CA	ALA	1166	14.034	43.911	13.861	1.00	37.31
	ATOM	2775	CB	ALA	1166	13.947	42.710	12.865	1.00	31.15
30	ATOM	2776	C	ALA	1166	12.772	44.215	14.805	1.00	43.04
	ATOM	2777	O	ALA	1166	12.511	43.659	15.923	1.00	37.20
	ATOM	2779	O01	AGI	1	22.581	24.990	39.854	1.00	16.66
	ATOM	2780	C02	AGI	1	21.643	25.593	38.942	1.00	16.79
	ATOM	2781	C03	AGI	1	25.810	23.097	40.054	1.00	12.94
35	ATOM	2782	C04	AGI	1	26.039	22.840	38.704	1.00	15.87
	ATOM	2783	C05	AGI	1	25.072	23.214	37.734	1.00	15.52
	ATOM	2784	C06	AGI	1	23.863	23.848	38.086	1.00	15.54
	ATOM	2785	C07	AGI	1	23.635	24.109	39.425	1.00	15.22
	ATOM	2786	C08	AGI	1	24.610	23.745	40.392	1.00	15.93
40	ATOM	2787	C09	AGI	1	25.336	23.054	36.320	1.00	13.68
	ATOM	2788	O10	AGI	1	24.581	23.581	35.521	1.00	16.24
	ATOM	2789	N11	AGI	1	26.326	22.271	35.893	1.00	11.13
	ATOM	2790	C12	AGI	1	26.999	22.855	32.377	1.00	18.19
	ATOM	2791	C13	AGI	1	27.526	21.562	32.037	1.00	22.15
45	ATOM	2792	C14	AGI	1	27.629	20.563	33.012	1.00	17.14
	ATOM	2793	C15	AGI	1	27.209	20.832	34.297	1.00	15.75
	ATOM	2794	C16	AGI	1	26.696	22.062	34.638	1.00	13.81
	ATOM	2795	C17	AGI	1	26.598	23.049	33.687	1.00	16.26
	ATOM	2796	C19	AGI	1	20.848	26.696	39.600	1.00	17.42
50	ATOM	2797	N20	AGI	1	21.380	27.920	39.764	1.00	17.28
	ATOM	2798	N21	AGI	1	20.407	28.768	40.248	1.00	17.95
	ATOM	2799	C22	AGI	1	19.311	28.072	40.381	1.00	17.31
	ATOM	2800	C23	AGI	1	19.497	26.753	39.978	1.00	17.39
	ATOM	2801	N24	AGI	1	18.007	28.598	40.723	1.00	19.82
55	ATOM	2802	C25	AGI	1	16.858	27.971	40.907	1.00	22.93
	ATOM	2803	C26	AGI	1	16.601	26.661	40.456	1.00	24.71
	ATOM	2804	N27	AGI	1	15.429	26.101	40.663	1.00	23.52
	ATOM	2805	C28	AGI	1	14.481	26.797	41.322	1.00	24.68
	ATOM	2806	C29	AGI	1	14.624	28.102	41.767	1.00	18.61
60	ATOM	2807	C30	AGI	1	15.845	28.696	41.548	1.00	21.59
	ATOM	2808	O31	AGI	1	13.225	26.195	41.356	1.00	29.16
	ATOM	2809	C32	AGI	1	13.124	24.983	40.581	1.00	37.28

	ATOM	2810	C34	AGI	1	26.866	24.022	31.466	1.00	17.98
	ATOM	2811	N35	AGI	1	28.124	21.233	30.792	1.00	24.65
	ATOM	2812	C36	AGI	1	29.442	21.338	30.508	1.00	24.97
	ATOM	2813	C37	AGI	1	27.523	20.851	29.629	1.00	25.52
5	ATOM	2814	F38	AGI	1	28.039	24.363	30.902	1.00	18.90
	ATOM	2815	F39	AGI	1	25.949	23.826	30.522	1.00	17.17
	ATOM	2816	F40	AGI	1	26.494	25.102	32.144	1.00	21.67
	ATOM	2817	N41	AGI	1	28.435	20.729	28.626	1.00	24.59
	ATOM	2818	C71	AGI	1	29.616	21.046	29.146	1.00	24.41
10	ATOM	2819	F72	AGI	1	24.419	24.059	41.674	1.00	14.22
	ATOM	2820	H47	AGI	1	26.860	21.891	36.600	1.00	0.00
	ATOM	2821	H51	AGI	1	22.315	28.179	39.613	1.00	0.00
	ATOM	2822	H53	AGI	1	17.963	29.571	40.837	1.00	0.00
	ATOM	2823	OH2	WAT	1	21.400	15.094	31.045	1.00	22.93
15	ATOM	2826	OH2	WAT	2	19.425	11.225	30.668	1.00	25.96
	ATOM	2829	OH2	WAT	3	21.340	12.536	34.686	1.00	17.84
	ATOM	2832	OH2	WAT	4	19.657	12.032	36.567	1.00	29.56
	ATOM	2835	OH2	WAT	5	20.130	11.164	40.355	1.00	15.79
	ATOM	2838	OH2	WAT	6	38.456	24.879	52.594	1.00	36.99
20	ATOM	2841	OH2	WAT	7	41.194	28.067	35.609	1.00	33.41
	ATOM	2844	OH2	WAT	8	36.265	23.160	51.508	1.00	20.75
	ATOM	2847	OH2	WAT	9	20.851	13.323	29.065	1.00	38.90
	ATOM	2850	OH2	WAT	10	41.762	23.986	37.979	1.00	21.57
	ATOM	2853	OH2	WAT	11	30.544	26.901	34.010	1.00	54.58
25	ATOM	2856	OH2	WAT	12	28.451	15.178	47.258	1.00	9.68
	ATOM	2859	OH2	WAT	13	30.460	3.539	45.592	1.00	21.26
	ATOM	2862	OH2	WAT	14	33.940	0.946	40.551	1.00	4.70
	ATOM	2865	OH2	WAT	15	35.968	6.373	36.177	1.00	24.22
	ATOM	2868	OH2	WAT	16	35.226	9.477	35.278	1.00	51.52
30	ATOM	2871	OH2	WAT	17	37.571	13.408	37.243	1.00	30.00
	ATOM	2874	OH2	WAT	18	12.569	21.510	28.708	1.00	13.07
	ATOM	2877	OH2	WAT	19	8.671	23.622	27.576	1.00	17.97
	ATOM	2880	OH2	WAT	20	7.595	14.965	27.755	1.00	25.61
	ATOM	2883	OH2	WAT	21	10.790	28.469	36.897	1.00	18.48
35	ATOM	2886	OH2	WAT	22	-2.527	28.562	27.567	1.00	22.35
	ATOM	2889	OH2	WAT	23	-1.844	37.437	28.067	1.00	27.08
	ATOM	2892	OH2	WAT	24	14.429	38.747	34.588	1.00	32.22
	ATOM	2895	OH2	WAT	25	15.299	41.405	37.396	1.00	32.27
	ATOM	2898	OH2	WAT	26	7.923	42.971	21.716	1.00	25.29
40	ATOM	2901	OH2	WAT	27	3.115	25.355	10.833	1.00	28.14
	ATOM	2904	OH2	WAT	28	10.227	21.558	32.746	1.00	26.54
	ATOM	2907	OH2	WAT	29	19.486	30.207	10.202	1.00	28.95
	ATOM	2910	OH2	WAT	30	14.453	32.638	9.591	1.00	17.41
	ATOM	2913	OH2	WAT	31	11.205	37.188	13.909	1.00	21.75
45	ATOM	2916	OH2	WAT	32	4.982	20.331	10.232	1.00	43.45
	ATOM	2919	OH2	WAT	33	17.179	24.649	6.341	1.00	28.28
	ATOM	2922	OH2	WAT	34	11.623	39.889	14.687	1.00	35.89
	ATOM	2925	OH2	WAT	35	11.339	39.971	11.260	1.00	40.88
	ATOM	2928	OH2	WAT	36	29.633	37.146	28.393	1.00	27.63
50	ATOM	2931	OH2	WAT	37	35.868	33.440	30.026	1.00	30.10
	ATOM	2934	OH2	WAT	38	27.533	24.986	16.088	1.00	19.59
	ATOM	2937	OH2	WAT	39	29.319	28.258	16.624	1.00	16.81
	ATOM	2940	OH2	WAT	40	23.781	16.794	21.247	1.00	17.50
	ATOM	2943	OH2	WAT	41	19.170	16.113	23.745	1.00	13.71
55	ATOM	2946	OH2	WAT	42	20.546	7.592	21.724	1.00	45.91
	ATOM	2949	OH2	WAT	43	15.869	22.633	7.299	1.00	18.39
	ATOM	2952	OH2	WAT	44	30.507	13.495	47.426	1.00	11.20
	ATOM	2955	OH2	WAT	45	36.403	28.744	58.203	1.00	39.64
	ATOM	2958	OH2	WAT	46	38.544	27.398	56.745	1.00	29.70
60	ATOM	2961	OH2	WAT	47	13.063	20.681	9.314	1.00	23.53
	ATOM	2964	OH2	WAT	48	14.614	20.766	5.692	1.00	64.50
	ATOM	2967	OH2	WAT	49	14.317	15.435	5.814	1.00	48.17

	ATOM	2970	OH2	WAT	50	10.496	20.770	30.174	1.00	18.58
	ATOM	2973	OH2	WAT	51	1.321	23.079	27.109	1.00	20.63
	ATOM	2976	OH2	WAT	52	13.746	13.952	18.647	1.00	15.79
	ATOM	2979	OH2	WAT	53	20.805	15.439	20.029	1.00	28.31
5	ATOM	2982	OH2	WAT	54	28.585	18.020	13.436	1.00	45.07
	ATOM	2985	OH2	WAT	55	25.707	15.518	14.814	1.00	39.11
	ATOM	2988	OH2	WAT	56	25.637	11.616	11.869	1.00	65.38
	ATOM	2991	OH2	WAT	57	3.040	17.846	17.201	1.00	33.20
	ATOM	2994	OH2	WAT	58	2.210	26.661	21.052	1.00	12.51
10	ATOM	2997	OH2	WAT	59	25.674	8.909	12.371	1.00	37.85
	ATOM	3000	OH2	WAT	60	42.879	28.354	26.363	1.00	40.00
	ATOM	3003	OH2	WAT	61	41.495	26.856	37.868	1.00	26.84
	ATOM	3006	OH2	WAT	62	39.910	21.848	34.542	1.00	11.92
	ATOM	3009	OH2	WAT	63	41.932	26.200	27.111	1.00	36.10
15	ATOM	3012	OH2	WAT	64	20.358	17.857	32.701	1.00	14.85
	ATOM	3015	OH2	WAT	65	20.099	12.911	32.457	1.00	15.26
	ATOM	3018	OH2	WAT	66	15.746	18.911	38.679	1.00	26.77
	ATOM	3021	OH2	WAT	67	20.002	37.361	9.196	1.00	20.39
	ATOM	3024	OH2	WAT	68	11.561	13.182	25.433	1.00	19.10
20	ATOM	3027	OH2	WAT	69	37.807	29.085	34.930	1.00	26.93
	ATOM	3030	OH2	WAT	70	38.034	32.720	36.667	1.00	26.50
	ATOM	3033	OH2	WAT	71	21.330	12.775	26.497	1.00	50.64
	ATOM	3036	OH2	WAT	72	40.911	31.406	34.061	1.00	52.28
	ATOM	3039	OH2	WAT	73	13.428	16.134	39.067	1.00	40.88
25	ATOM	3042	OH2	WAT	74	11.854	21.495	35.083	1.00	25.55
	ATOM	3045	OH2	WAT	75	20.227	12.458	51.144	1.00	29.24
	ATOM	3048	OH2	WAT	76	8.387	29.945	37.663	1.00	25.72
	ATOM	3051	OH2	WAT	77	5.126	33.659	37.350	1.00	42.19
	ATOM	3054	OH2	WAT	78	0.926	33.198	37.381	1.00	82.00
30	ATOM	3057	OH2	WAT	79	22.788	37.140	47.076	1.00	20.62
	ATOM	3060	OH2	WAT	80	28.422	2.602	41.035	1.00	43.55
	ATOM	3063	OH2	WAT	81	-1.367	21.107	21.842	1.00	43.55
	ATOM	3066	OH2	WAT	82	24.342	39.630	48.038	1.00	54.36
	ATOM	3069	OH2	WAT	83	-0.780	25.339	18.469	1.00	47.73
35	ATOM	3072	OH2	WAT	84	1.502	23.967	20.101	1.00	34.19
	ATOM	3075	OH2	WAT	85	2.141	23.794	17.505	1.00	50.27
	ATOM	3078	OH2	WAT	86	29.188	33.645	22.250	1.00	18.29
	ATOM	3081	OH2	WAT	87	32.012	33.308	22.855	1.00	36.00
	ATOM	3084	OH2	WAT	88	36.492	31.032	23.519	1.00	42.81
40	ATOM	3087	OH2	WAT	89	31.678	28.677	18.496	1.00	17.48
	ATOM	3090	OH2	WAT	90	30.000	25.753	16.377	1.00	33.66
	ATOM	3093	OH2	WAT	91	7.414	6.354	25.176	1.00	45.95
	ATOM	3096	OH2	WAT	92	8.145	21.093	28.714	1.00	23.34
	ATOM	3099	OH2	WAT	93	4.681	26.807	35.437	1.00	34.41
45	ATOM	3102	OH2	WAT	94	-4.670	27.121	27.969	1.00	7.66
	ATOM	3105	OH2	WAT	95	15.897	30.820	8.074	1.00	17.41
	ATOM	3108	OH2	WAT	96	20.800	27.309	7.802	1.00	29.75
	ATOM	3111	OH2	WAT	97	19.327	32.337	7.534	1.00	46.08
	ATOM	3114	OH2	WAT	98	16.392	43.067	24.309	1.00	47.31
50	ATOM	3117	OH2	WAT	99	14.351	42.324	26.504	1.00	46.39
	ATOM	3120	OH2	WAT	100	18.815	40.297	24.345	1.00	15.27
	ATOM	3123	OH2	WAT	101	31.775	36.166	32.325	1.00	31.35
	ATOM	3126	OH2	WAT	102	35.715	39.142	32.148	1.00	39.28
	ATOM	3129	OH2	WAT	103	32.889	40.771	31.188	1.00	42.39
55	ATOM	3132	OH2	WAT	104	36.867	31.193	29.065	1.00	23.94
	ATOM	3135	OH2	WAT	105	17.566	17.625	25.778	1.00	18.98
	ATOM	3138	OH2	WAT	106	21.398	19.009	23.367	1.00	21.53
	ATOM	3141	OH2	WAT	107	27.101	13.921	12.898	1.00	26.04
	ATOM	3144	OH2	WAT	108	6.559	22.545	8.817	1.00	37.57
60	ATOM	3147	OH2	WAT	109	2.404	33.695	16.329	1.00	32.60
	ATOM	3150	OH2	WAT	110	30.800	18.720	17.732	1.00	36.44
	ATOM	3153	OH2	WAT	111	32.266	16.203	18.052	1.00	28.37

	ATOM	3156	OH2	WAT	112	10.955	26.078	38.607	1.00	34.45
	ATOM	3159	OH2	WAT	113	45.573	22.495	38.903	1.00	35.85
	ATOM	3162	OH2	WAT	114	23.554	33.882	10.094	1.00	20.02
	ATOM	3165	OH2	WAT	115	-7.644	36.627	32.108	1.00	33.76
5	ATOM	3168	OH2	WAT	116	-6.579	37.715	34.359	1.00	31.08
	ATOM	3171	OH2	WAT	117	1.439	22.456	22.255	1.00	26.66
	ATOM	3174	OH2	WAT	118	14.067	30.888	44.225	1.00	49.65
	ATOM	3177	OH2	WAT	119	23.627	38.167	35.878	1.00	32.18
	ATOM	3180	OH2	WAT	120	8.872	12.471	26.415	1.00	25.08
10	ATOM	3183	OH2	WAT	121	20.205	3.862	25.679	1.00	29.23
	ATOM	3186	OH2	WAT	122	7.792	18.309	28.535	1.00	24.72
	ATOM	3189	OH2	WAT	123	7.230	22.937	36.086	1.00	54.52
	ATOM	3192	OH2	WAT	124	17.059	27.997	51.101	1.00	42.63
	ATOM	3195	OH2	WAT	125	20.605	29.282	53.106	1.00	32.36
15	ATOM	3198	OH2	WAT	126	24.621	23.938	56.498	1.00	43.67
	ATOM	3201	OH2	WAT	127	36.692	32.140	46.931	1.00	38.37
	ATOM	3204	OH2	WAT	128	30.621	36.680	48.150	1.00	21.14
	ATOM	3207	OH2	WAT	129	36.269	41.301	46.523	1.00	29.26
	ATOM	3210	OH2	WAT	130	36.205	37.173	47.745	1.00	53.21
20	ATOM	3213	OH2	WAT	131	5.529	28.982	38.678	1.00	78.87
	ATOM	3216	OH2	WAT	132	2.253	20.712	24.095	1.00	19.33
	ATOM	3219	OH2	WAT	133	0.531	24.389	24.135	1.00	25.62
	ATOM	3222	OH2	WAT	134	8.227	29.872	7.959	1.00	39.23
	ATOM	3225	OH2	WAT	135	15.449	17.965	6.387	1.00	37.51
25	ATOM	3228	OH2	WAT	136	15.038	14.100	8.724	1.00	35.56
	ATOM	3231	OH2	WAT	137	24.768	14.954	6.638	1.00	30.06
	ATOM	3234	OH2	WAT	138	27.417	14.777	8.898	1.00	36.79
	ATOM	3237	OH2	WAT	139	32.940	32.679	20.535	1.00	38.18
	ATOM	3240	OH2	WAT	140	29.393	36.401	23.686	1.00	28.09
30	ATOM	3243	OH2	WAT	141	41.286	22.940	32.431	1.00	46.39
	ATOM	3246	OH2	WAT	142	44.351	28.056	37.461	1.00	54.07
	ATOM	3249	OH2	WAT	143	44.549	30.912	36.915	1.00	35.83
	ATOM	3252	OH2	WAT	144	45.137	31.749	39.579	1.00	42.05
	ATOM	3255	OH2	WAT	145	19.761	9.348	38.127	1.00	42.22
35	ATOM	3258	OH2	WAT	146	23.945	8.207	37.578	1.00	41.26
	ATOM	3261	OH2	WAT	147	23.828	13.796	34.371	1.00	29.35
	ATOM	3264	OH2	WAT	148	25.179	16.087	37.292	1.00	18.88
	ATOM	3267	OH2	WAT	149	27.551	15.302	37.684	1.00	19.93
	ATOM	3270	OH2	WAT	150	27.545	14.162	35.163	1.00	45.83
40	ATOM	3273	OH2	WAT	151	30.144	14.715	34.658	1.00	31.23
	ATOM	3276	OH2	WAT	152	31.117	7.978	36.709	1.00	24.33
	ATOM	3279	OH2	WAT	153	32.536	10.111	35.494	1.00	38.47
	ATOM	3282	OH2	WAT	154	35.384	7.731	31.998	1.00	27.78
	ATOM	3285	OH2	WAT	155	32.058	12.219	33.534	1.00	50.41
45	ATOM	3288	OH2	WAT	156	23.379	3.450	43.753	1.00	42.28
	ATOM	3291	OH2	WAT	157	24.214	17.003	29.578	1.00	43.28
	ATOM	3294	OH2	WAT	158	23.568	15.432	32.311	1.00	26.14
	ATOM	3297	OH2	WAT	159	19.100	15.334	33.790	1.00	14.55
	ATOM	3300	OH2	WAT	160	27.245	8.720	37.332	1.00	31.35
50	ATOM	3303	OH2	WAT	161	28.569	8.004	34.705	1.00	48.08
	ATOM	3306	OH2	WAT	162	36.172	31.123	35.274	1.00	24.65
	ATOM	3309	OH2	WAT	163	36.846	36.393	29.950	1.00	42.07
	ATOM	3312	OH2	WAT	164	37.499	10.359	37.930	1.00	36.50
	ATOM	3315	OH2	WAT	165	35.754	29.738	45.821	1.00	24.24
55	ATOM	3318	OH2	WAT	166	34.583	13.981	49.592	1.00	22.44
	ATOM	3321	OH2	WAT	167	28.355	22.366	54.343	1.00	44.69
	ATOM	3324	OH2	WAT	168	25.218	7.363	49.242	1.00	31.91
	ATOM	3327	OH2	WAT	169	25.394	8.715	51.592	1.00	37.30
	ATOM	3330	OH2	WAT	170	23.407	35.493	41.806	1.00	44.65
60	ATOM	3333	OH2	WAT	171	13.548	24.364	5.696	1.00	35.54
	ATOM	3336	OH2	WAT	172	16.095	28.941	5.737	1.00	54.96
	ATOM	3339	OH2	WAT	173	32.740	5.837	36.914	1.00	29.69

	ATOM	3342	OH2	WAT	174	0.926	28.119	15.089	1.00	45.75
	ATOM	3345	OH2	WAT	175	2.496	20.839	27.362	1.00	39.33
	ATOM	3348	OH2	WAT	176	3.425	16.659	24.014	1.00	40.49
	ATOM	3351	OH2	WAT	177	13.539	18.383	41.458	1.00	48.62
5	ATOM	3354	OH2	WAT	178	23.784	2.485	27.988	1.00	45.78
	ATOM	3357	OH2	WAT	179	21.591	1.684	27.146	1.00	43.48
	ATOM	3360	OH2	WAT	180	25.442	14.545	29.919	1.00	52.10
	ATOM	3363	OH2	WAT	181	-0.323	34.236	33.456	1.00	30.00
	ATOM	3366	OH2	WAT	182	-1.400	35.866	35.094	1.00	64.81
10	ATOM	3369	OH2	WAT	183	18.717	35.915	39.911	1.00	39.40
	ATOM	3372	OH2	WAT	184	20.192	3.855	19.004	1.00	65.10
	ATOM	3375	OH2	WAT	185	13.114	16.579	18.007	1.00	20.91
	ATOM	3378	OH2	WAT	186	10.278	19.050	14.953	1.00	14.02
	ATOM	3381	OH2	WAT	187	5.995	17.542	9.142	1.00	44.05
15	ATOM	3384	OH2	WAT	188	23.018	11.761	9.729	1.00	55.21
	ATOM	3387	OH2	WAT	189	40.655	11.538	37.730	1.00	35.06
	ATOM	3390	OH2	WAT	190	35.928	15.295	47.603	1.00	26.51
	ATOM	3393	OH2	WAT	191	34.985	24.299	56.702	1.00	44.83
	ATOM	3396	OH2	WAT	192	37.788	24.278	55.462	1.00	30.04
20	ATOM	3399	OH2	WAT	193	19.634	24.968	7.883	1.00	31.74
	ATOM	3402	OH2	WAT	194	22.698	35.658	8.378	1.00	43.95
	ATOM	3405	OH2	WAT	195	23.806	39.273	8.938	1.00	31.47
	ATOM	3408	OH2	WAT	196	14.668	33.928	45.167	1.00	38.80
	ATOM	3411	OH2	WAT	197	0.503	26.774	31.064	1.00	26.19
25	ATOM	3414	OH2	WAT	198	-0.884	24.774	29.206	1.00	36.18
	ATOM	3417	OH2	WAT	199	33.265	30.616	36.622	1.00	28.85
	ATOM	3420	OH2	WAT	200	-1.883	38.952	34.210	1.00	39.70
	ATOM	3423	OH2	WAT	201	28.509	27.847	8.232	1.00	39.08
	ATOM	3426	OH2	WAT	202	26.251	33.746	8.789	1.00	40.91
30	ATOM	3429	OH2	WAT	203	36.519	5.008	47.232	1.00	21.32
	ATOM	3432	OH2	WAT	204	39.295	25.319	23.262	1.00	49.87
	ATOM	3435	OH2	WAT	205	34.909	12.654	30.626	1.00	42.39
	ATOM	3438	OH2	WAT	206	9.995	33.513	6.870	1.00	33.84
	ATOM	3441	OH2	WAT	207	27.652	36.150	34.703	1.00	25.20
35	ATOM	3444	OH2	WAT	208	31.454	37.403	30.154	1.00	62.01
	ATOM	3447	OH2	WAT	209	3.316	20.483	17.051	1.00	37.60
	ATOM	3450	OH2	WAT	210	22.529	9.513	34.500	1.00	30.89
	ATOM	3453	OH2	WAT	211	24.061	10.138	30.925	1.00	53.71
	ATOM	3456	OH2	WAT	212	26.407	11.862	29.483	1.00	58.43
40	ATOM	3459	OH2	WAT	213	24.309	11.890	27.391	1.00	42.53
	ATOM	3462	OH2	WAT	214	20.718	13.927	23.791	1.00	34.21
	ATOM	3465	OH2	WAT	215	33.155	11.250	49.105	1.00	29.04
	ATOM	3468	OH2	WAT	216	34.161	9.623	47.264	1.00	49.06
	ATOM	3471	OH2	WAT	217	37.051	10.064	47.525	1.00	35.04
45	ATOM	3474	OH2	WAT	218	13.043	19.110	34.861	1.00	45.77
	ATOM	3477	OH2	WAT	219	11.468	17.875	32.713	1.00	33.57
	ATOM	3480	OH2	WAT	220	42.342	25.715	34.287	1.00	40.43
	ATOM	3483	OH2	WAT	221	31.777	29.619	34.907	1.00	41.84
	ATOM	3486	OH2	WAT	222	28.273	17.528	34.026	1.00	26.18
50	ATOM	3489	OH2	WAT	223	14.914	21.654	35.275	1.00	35.10
	ATOM	3492	OH2	WAT	224	14.758	21.475	37.921	1.00	34.66
	ATOM	3495	OH2	WAT	225	31.865	16.492	32.505	1.00	34.93
	ATOM	3498	OH2	WAT	226	25.802	17.629	34.984	1.00	36.93



TABLE 5

Atomic Coordinates for  
 5 VEGFR2KD: 2-Isopropyl-5-methyl-2H-pyrazole-3-carboxylic acid(2-methyl-5-{1-[3-((E)-2-pyridin-2-yl-vinyl)-1H-indazol-6-yl]-methanoyl}-phenyl)-amide (Compound 5)  
 Complex Crystalline Structure

	ATOM	1	CB	ASP	814	32.792	17.904	27.786	1.00	34.19
	ATOM	2	CG	ASP	814	31.890	17.697	26.555	1.00	31.34
10	ATOM	3	OD1	ASP	814	30.842	18.313	26.561	1.00	34.05
	ATOM	4	OD2	ASP	814	32.173	16.953	25.642	1.00	29.39
	ATOM	5	C	ASP	814	34.045	15.711	27.928	1.00	38.24
	ATOM	6	O	ASP	814	33.267	15.218	28.735	1.00	35.76
	ATOM	7	HT1	ASP	814	34.857	17.538	25.812	1.00	0.00
15	ATOM	8	HT2	ASP	814	36.133	17.723	26.954	1.00	0.00
	ATOM	9	N	ASP	814	35.120	17.834	26.778	1.00	38.48
	ATOM	10	HT3	ASP	814	34.957	18.874	26.817	1.00	0.00
	ATOM	11	CA	ASP	814	34.215	17.247	27.846	1.00	36.49
	ATOM	12	N	GLU	815	34.742	14.937	27.050	1.00	39.62
20	ATOM	13	H	GLU	815	35.232	15.324	26.306	1.00	0.00
	ATOM	14	CA	GLU	815	34.645	13.440	27.084	1.00	41.72
	ATOM	15	CB	GLU	815	34.943	12.726	25.771	1.00	47.91
	ATOM	16	CG	GLU	815	33.745	12.754	24.767	1.00	55.41
	ATOM	17	CD	GLU	815	34.190	12.536	23.302	1.00	60.84
25	ATOM	18	OE1	GLU	815	33.274	12.381	22.456	1.00	64.13
	ATOM	19	OE2	GLU	815	35.419	12.536	23.025	1.00	64.11
	ATOM	20	C	GLU	815	35.673	12.835	27.999	1.00	38.61
	ATOM	21	O	GLU	815	35.474	11.747	28.534	1.00	38.86
	ATOM	22	N	HIS	816	36.825	13.496	28.050	1.00	32.91
30	ATOM	23	H	HIS	816	37.002	14.213	27.410	1.00	0.00
	ATOM	24	CA	HIS	816	37.899	13.008	28.916	1.00	30.05
	ATOM	25	C	HIS	816	38.171	14.015	30.026	1.00	27.77
	ATOM	26	O	HIS	816	39.242	14.568	30.196	1.00	26.11
	ATOM	27	CB	HIS	816	39.135	12.741	28.008	1.00	28.88
35	ATOM	28	CG	HIS	816	38.886	11.687	26.992	1.00	31.79
	ATOM	29	ND1	HIS	816	39.568	10.507	26.964	1.00	33.32
	ATOM	30	CE1	HIS	816	39.064	9.771	25.900	1.00	31.90
	ATOM	31	CD2	HIS	816	37.958	11.651	25.919	1.00	31.49
	ATOM	32	NE2	HIS	816	38.076	10.475	25.260	1.00	32.16
40	ATOM	33	HE2	HIS	816	37.655	10.204	24.424	1.00	0.00
	ATOM	34	N	CYS	817	37.164	14.306	30.834	1.00	25.42
	ATOM	35	H	CYS	817	36.321	13.790	30.722	1.00	0.00
	ATOM	36	CA	CYS	817	37.308	15.307	31.947	1.00	23.71
	ATOM	37	CB	CYS	817	35.956	15.620	32.666	1.00	23.28
45	ATOM	38	SG	CYS	817	34.686	16.058	31.489	1.00	26.10
	ATOM	39	C	CYS	817	38.256	15.018	33.098	1.00	21.95
	ATOM	40	O	CYS	817	38.714	15.926	33.760	1.00	21.78
	ATOM	41	N	GLU	818	38.478	13.742	33.404	1.00	22.35
	ATOM	42	H	GLU	818	38.028	13.109	32.820	1.00	0.00
50	ATOM	43	CA	GLU	818	39.361	13.303	34.525	1.00	21.52
	ATOM	44	CB	GLU	818	39.422	11.768	34.522	1.00	20.64
	ATOM	45	CG	GLU	818	38.057	11.107	34.645	1.00	19.04
	ATOM	46	CD	GLU	818	37.326	10.926	33.322	1.00	22.56
	ATOM	47	OE1	GLU	818	36.148	10.595	33.364	1.00	20.76
55	ATOM	48	OE2	GLU	818	37.918	11.081	32.256	1.00	23.23
	ATOM	49	C	GLU	818	40.772	13.872	34.549	1.00	22.45
	ATOM	50	O	GLU	818	41.373	14.013	35.615	1.00	23.59
	ATOM	51	N	ARG	819	41.297	14.209	33.364	1.00	21.54
	ATOM	52	H	ARG	819	40.775	13.958	32.575	1.00	0.00
60	ATOM	53	CA	ARG	819	42.656	14.791	33.233	1.00	23.95
	ATOM	54	CB	ARG	819	43.138	14.508	31.841	1.00	30.00
	ATOM	55	CG	ARG	819	42.016	15.104	30.917	1.00	38.15

	ATOM	56	CD	ARG	819	42.247	15.163	29.434	1.00	43.11
	ATOM	57	NE	ARG	819	43.631	15.592	29.423	1.00	50.62
	ATOM	58	HE	ARG	819	43.947	16.295	30.029	1.00	0.00
	ATOM	59	CZ	ARG	819	44.450	15.099	28.529	1.00	54.81
5	ATOM	60	NH1	ARG	819	44.015	14.233	27.582	1.00	57.46
	ATOM	61	HH11	ARG	819	43.054	13.951	27.548	1.00	0.00
	ATOM	62	HH12	ARG	819	44.655	13.873	26.905	1.00	0.00
	ATOM	63	NH2	ARG	819	45.748	15.367	28.734	1.00	57.06
	ATOM	64	HH21	ARG	819	46.025	15.905	29.529	1.00	0.00
10	ATOM	65	HH22	ARG	819	46.428	15.023	28.087	1.00	0.00
	ATOM	66	C	ARG	819	42.752	16.304	33.489	1.00	22.28
	ATOM	67	O	ARG	819	43.794	16.950	33.507	1.00	22.47
	ATOM	68	N	LEU	820	41.607	16.912	33.521	1.00	20.20
	ATOM	69	H	LEU	820	40.815	16.347	33.547	1.00	0.00
15	ATOM	70	CA	LEU	820	41.466	18.354	33.736	1.00	18.59
	ATOM	71	CB	LEU	820	39.969	18.654	33.393	1.00	18.69
	ATOM	72	CG	LEU	820	39.631	19.448	32.124	1.00	17.56
	ATOM	73	CD1	LEU	820	40.667	19.234	31.020	1.00	17.93
	ATOM	74	CD2	LEU	820	38.197	19.082	31.757	1.00	16.07
20	ATOM	75	C	LEU	820	41.891	18.772	35.166	1.00	17.06
	ATOM	76	O	LEU	820	41.773	17.988	36.105	1.00	20.02
	ATOM	77	N	PRO	821	42.365	20.013	35.390	1.00	14.81
	ATOM	78	CD	PRO	821	42.666	21.090	34.392	1.00	12.71
	ATOM	79	CA	PRO	821	42.840	20.403	36.704	1.00	13.37
25	ATOM	80	CB	PRO	821	43.863	21.515	36.426	1.00	15.11
	ATOM	81	CG	PRO	821	43.235	22.250	35.230	1.00	11.18
	ATOM	82	C	PRO	821	41.770	20.881	37.582	1.00	13.43
	ATOM	83	O	PRO	821	40.749	21.441	37.174	1.00	13.93
	ATOM	84	N	TYR	822	42.078	20.742	38.817	1.00	14.23
30	ATOM	85	H	TYR	822	42.819	20.139	39.033	1.00	0.00
	ATOM	86	CA	TYR	822	41.202	21.258	39.883	1.00	15.62
	ATOM	87	CB	TYR	822	40.508	20.165	40.830	1.00	12.04
	ATOM	88	CG	TYR	822	39.793	20.919	41.910	1.00	13.03
	ATOM	89	CD1	TYR	822	40.199	20.836	43.234	1.00	13.84
35	ATOM	90	CE1	TYR	822	39.526	21.665	44.142	1.00	18.12
	ATOM	91	CD2	TYR	822	38.739	21.796	41.560	1.00	14.24
	ATOM	92	CE2	TYR	822	38.073	22.618	42.473	1.00	14.86
	ATOM	93	CZ	TYR	822	38.482	22.547	43.775	1.00	15.14
	ATOM	94	OH	TYR	822	37.870	23.378	44.689	1.00	14.50
40	ATOM	95	HH	TYR	822	37.116	23.819	44.285	1.00	0.00
	ATOM	96	C	TYR	822	42.111	22.118	40.782	1.00	17.73
	ATOM	97	O	TYR	822	42.834	21.632	41.672	1.00	18.94
	ATOM	98	N	ASP	823	42.150	23.415	40.493	1.00	18.01
	ATOM	99	H	ASP	823	41.581	23.742	39.765	1.00	0.00
45	ATOM	100	CA	ASP	823	42.998	24.374	41.282	1.00	18.47
	ATOM	101	CB	ASP	823	43.336	25.574	40.386	1.00	20.70
	ATOM	102	CG	ASP	823	44.171	26.651	41.093	1.00	25.60
	ATOM	103	OD1	ASP	823	44.548	26.465	42.260	1.00	27.52
	ATOM	104	OD2	ASP	823	44.448	27.682	40.456	1.00	27.59
50	ATOM	105	C	ASP	823	42.305	24.835	42.568	1.00	16.18
	ATOM	106	O	ASP	823	41.642	25.863	42.660	1.00	14.86
	ATOM	107	N	ALA	824	42.434	23.996	43.573	1.00	15.80
	ATOM	108	H	ALA	824	42.883	23.143	43.377	1.00	0.00
	ATOM	109	CA	ALA	824	41.822	24.198	44.907	1.00	16.25
55	ATOM	110	CB	ALA	824	42.274	23.060	45.897	1.00	15.30
	ATOM	111	C	ALA	824	42.191	25.553	45.496	1.00	16.54
	ATOM	112	O	ALA	824	41.328	26.202	46.092	1.00	13.68
	ATOM	113	N	SER	825	43.425	26.045	45.287	1.00	16.15
	ATOM	114	H	SER	825	44.091	25.534	44.796	1.00	0.00
60	ATOM	115	CA	SER	825	43.714	27.364	45.855	1.00	19.81
	ATOM	116	CB	SER	825	45.230	27.783	45.681	1.00	21.01
	ATOM	117	OG	SER	825	45.588	28.116	44.348	1.00	26.58

	ATOM	118	HG	SER	825	46.533	28.283	44.302	1.00	0.00
	ATOM	119	C	SER	825	42.764	28.421	45.216	1.00	22.04
	ATOM	120	O	SER	825	42.318	29.362	45.898	1.00	23.79
	ATOM	121	N	LYS	826	42.395	28.301	43.921	1.00	17.92
5	ATOM	122	H	LYS	826	42.733	27.560	43.381	1.00	0.00
	ATOM	123	CA	LYS	826	41.454	29.272	43.387	1.00	16.61
	ATOM	124	CB	LYS	826	41.603	29.266	41.869	1.00	15.46
	ATOM	125	CG	LYS	826	40.455	30.038	41.205	1.00	16.75
	ATOM	126	CD	LYS	826	40.829	30.482	39.799	1.00	17.61
10	ATOM	127	CE	LYS	826	39.634	31.089	39.068	1.00	18.52
	ATOM	128	NZ	LYS	826	40.022	31.142	37.650	1.00	19.13
	ATOM	129	HZ1	LYS	826	40.353	30.196	37.373	1.00	0.00
	ATOM	130	HZ2	LYS	826	40.792	31.830	37.520	1.00	0.00
	ATOM	131	HZ3	LYS	826	39.213	31.415	37.056	1.00	0.00
15	ATOM	132	C	LYS	826	39.957	28.981	43.781	1.00	17.40
	ATOM	133	O	LYS	826	39.169	29.813	44.249	1.00	16.92
	ATOM	134	N	TRP	827	39.538	27.725	43.557	1.00	16.49
	ATOM	135	H	TRP	827	40.213	27.094	43.240	1.00	0.00
	ATOM	136	CA	TRP	827	38.140	27.295	43.763	1.00	14.07
20	ATOM	137	CB	TRP	827	37.822	26.194	42.756	1.00	10.82
	ATOM	138	CG	TRP	827	38.026	26.782	41.394	1.00	10.09
	ATOM	139	CD2	TRP	827	37.221	27.684	40.681	1.00	10.60
	ATOM	140	CE2	TRP	827	37.849	27.872	39.408	1.00	9.95
	ATOM	141	CE3	TRP	827	36.015	28.350	40.987	1.00	10.24
25	ATOM	142	CD1	TRP	827	39.099	26.497	40.524	1.00	8.66
	ATOM	143	NE1	TRP	827	38.991	27.140	39.352	1.00	6.01
	ATOM	144	HE1	TRP	827	39.652	27.144	38.614	1.00	0.00
	ATOM	145	CZ2	TRP	827	37.253	28.726	38.442	1.00	13.84
	ATOM	146	CZ3	TRP	827	35.463	29.193	40.007	1.00	12.76
30	ATOM	147	CH2	TRP	827	36.051	29.402	38.724	1.00	12.28
	ATOM	148	C	TRP	827	37.603	26.851	45.076	1.00	14.96
	ATOM	149	O	TRP	827	36.392	26.963	45.307	1.00	13.52
	ATOM	150	N	GLU	828	38.463	26.275	45.904	1.00	13.08
	ATOM	151	H	GLU	828	39.424	26.402	45.763	1.00	0.00
35	ATOM	152	CA	GLU	828	37.963	25.743	47.185	1.00	16.34
	ATOM	153	CB	GLU	828	39.155	25.045	47.869	1.00	15.40
	ATOM	154	CG	GLU	828	38.714	24.059	48.963	1.00	14.44
	ATOM	155	CD	GLU	828	37.991	22.826	48.442	1.00	14.62
	ATOM	156	OE1	GLU	828	37.261	22.321	49.290	1.00	12.81
40	ATOM	157	OE2	GLU	828	38.167	22.377	47.292	1.00	10.65
	ATOM	158	C	GLU	828	37.288	26.779	48.108	1.00	15.33
	ATOM	159	O	GLU	828	37.797	27.842	48.394	1.00	15.54
	ATOM	160	N	PHE	829	36.086	26.440	48.559	1.00	16.21
	ATOM	161	H	PHE	829	35.727	25.601	48.214	1.00	0.00
45	ATOM	162	CA	PHE	829	35.218	27.254	49.436	1.00	14.05
	ATOM	163	CB	PHE	829	33.849	27.557	48.665	1.00	10.99
	ATOM	164	CG	PHE	829	33.147	28.656	49.333	1.00	11.55
	ATOM	165	CD1	PHE	829	33.743	29.922	49.464	1.00	10.82
	ATOM	166	CD2	PHE	829	31.869	28.452	49.868	1.00	12.79
50	ATOM	167	CE1	PHE	829	33.088	30.975	50.115	1.00	10.30
	ATOM	168	CE2	PHE	829	31.224	29.508	50.515	1.00	11.60
	ATOM	169	CZ	PHE	829	31.822	30.755	50.639	1.00	9.05
	ATOM	170	C	PHE	829	34.952	26.518	50.765	1.00	15.43
	ATOM	171	O	PHE	829	34.617	25.337	50.781	1.00	14.65
55	ATOM	172	N	PRO	830	35.126	27.158	51.949	1.00	18.23
	ATOM	173	CD	PRO	830	35.554	28.573	52.200	1.00	19.04
	ATOM	174	CA	PRO	830	34.903	26.447	53.215	1.00	17.34
	ATOM	175	CB	PRO	830	35.435	27.436	54.240	1.00	17.75
	ATOM	176	CG	PRO	830	36.428	28.272	53.421	1.00	17.34
60	ATOM	177	C	PRO	830	33.448	26.083	53.357	1.00	18.48
	ATOM	178	O	PRO	830	32.553	26.917	53.203	1.00	19.35
	ATOM	179	N	ARG	831	33.193	24.824	53.648	1.00	19.36

	ATOM	180	H	ARG	831	33.923	24.174	53.685	1.00	0.00
	ATOM	181	CA	ARG	831	31.809	24.345	53.787	1.00	22.13
	ATOM	182	CB	ARG	831	31.841	22.802	54.127	1.00	23.97
	ATOM	183	CG	ARG	831	31.660	21.884	52.839	1.00	28.85
5	ATOM	184	CD	ARG	831	31.420	20.284	52.772	1.00	25.78
	ATOM	185	NE	ARG	831	32.750	19.812	53.046	1.00	28.74
	ATOM	186	HE	ARG	831	33.064	19.866	53.974	1.00	0.00
	ATOM	187	CZ	ARG	831	33.547	19.288	52.163	1.00	26.25
	ATOM	188	NH1	ARG	831	34.705	19.047	52.680	1.00	31.26
10	ATOM	189	HH11	ARG	831	34.875	19.205	53.653	1.00	0.00
	ATOM	190	HH12	ARG	831	35.439	18.725	52.098	1.00	0.00
	ATOM	191	NH2	ARG	831	33.250	18.942	50.926	1.00	26.75
	ATOM	192	HH21	ARG	831	32.327	19.101	50.585	1.00	0.00
	ATOM	193	HH22	ARG	831	33.939	18.537	50.321	1.00	0.00
15	ATOM	194	C	ARG	831	31.046	25.141	54.831	1.00	21.45
	ATOM	195	O	ARG	831	29.844	25.361	54.776	1.00	20.58
	ATOM	196	N	ASP	832	31.759	25.562	55.850	1.00	22.79
	ATOM	197	H	ASP	832	32.670	25.218	55.943	1.00	0.00
	ATOM	198	CA	ASP	832	31.144	26.363	56.926	1.00	24.66
20	ATOM	199	CB	ASP	832	32.038	26.342	58.176	1.00	26.69
	ATOM	200	CG	ASP	832	33.412	26.886	57.862	1.00	30.49
	ATOM	201	OD1	ASP	832	34.154	26.265	57.067	1.00	37.07
	ATOM	202	OD2	ASP	832	33.714	27.913	58.462	1.00	27.78
	ATOM	203	C	ASP	832	30.864	27.833	56.529	1.00	24.35
25	ATOM	204	O	ASP	832	30.483	28.647	57.369	1.00	24.15
	ATOM	205	N	ARG	833	31.253	28.282	55.333	1.00	20.11
	ATOM	206	H	ARG	833	31.731	27.704	54.711	1.00	0.00
	ATOM	207	CA	ARG	833	30.903	29.642	54.935	1.00	16.17
	ATOM	208	CB	ARG	833	32.089	30.230	54.191	1.00	14.95
30	ATOM	209	CG	ARG	833	33.204	30.379	55.165	1.00	16.15
	ATOM	210	CD	ARG	833	33.538	31.781	54.874	1.00	20.84
	ATOM	211	NE	ARG	833	34.805	31.993	54.146	1.00	27.78
	ATOM	212	HE	ARG	833	34.791	32.348	53.230	1.00	0.00
	ATOM	213	CZ	ARG	833	35.989	31.723	54.732	1.00	27.36
35	ATOM	214	NH1	ARG	833	37.130	31.948	54.127	1.00	25.41
	ATOM	215	HH11	ARG	833	37.146	32.330	53.202	1.00	0.00
	ATOM	216	HH12	ARG	833	37.988	31.728	54.589	1.00	0.00
	ATOM	217	NH2	ARG	833	36.073	31.154	55.918	1.00	28.20
	ATOM	218	HH21	ARG	833	35.241	30.912	56.421	1.00	0.00
40	ATOM	219	HH22	ARG	833	36.968	30.957	56.319	1.00	0.00
	ATOM	220	C	ARG	833	29.642	29.544	54.064	1.00	14.55
	ATOM	221	O	ARG	833	29.170	30.471	53.409	1.00	11.52
	ATOM	222	N	LEU	834	29.192	28.303	53.899	1.00	14.66
	ATOM	223	H	LEU	834	29.664	27.557	54.322	1.00	0.00
45	ATOM	224	CA	LEU	834	27.997	27.969	53.149	1.00	15.53
	ATOM	225	CB	LEU	834	28.444	26.857	52.205	1.00	16.57
	ATOM	226	CG	LEU	834	27.574	26.497	51.011	1.00	17.21
	ATOM	227	CD1	LEU	834	27.489	27.672	50.001	1.00	15.90
	ATOM	228	CD2	LEU	834	28.193	25.239	50.348	1.00	16.08
50	ATOM	229	C	LEU	834	26.804	27.554	54.071	1.00	18.19
	ATOM	230	O	LEU	834	26.869	26.599	54.854	1.00	20.08
	ATOM	231	N	LYS	835	25.731	28.339	54.096	1.00	18.80
	ATOM	232	H	LYS	835	25.791	29.211	53.645	1.00	0.00
	ATOM	233	CA	LYS	835	24.486	28.006	54.846	1.00	18.93
55	ATOM	234	CB	LYS	835	23.832	29.237	55.533	1.00	18.73
	ATOM	235	C	LYS	835	23.421	27.418	53.876	1.00	18.08
	ATOM	236	O	LYS	835	22.738	28.109	53.123	1.00	17.66
	ATOM	237	N	LEU	836	23.323	26.097	53.798	1.00	17.29
	ATOM	238	H	LEU	836	24.005	25.583	54.268	1.00	0.00
60	ATOM	239	CA	LEU	836	22.369	25.397	52.956	1.00	16.65
	ATOM	240	CB	LEU	836	22.705	23.919	53.018	1.00	17.58
	ATOM	241	CG	LEU	836	23.722	23.441	51.995	1.00	22.03

	ATOM	242	CD1	LEU	836	25.106	23.997	52.271	1.00	25.61
	ATOM	243	CD2	LEU	836	23.777	21.900	52.091	1.00	27.26
	ATOM	244	C	LEU	836	20.908	25.597	53.274	1.00	17.48
	ATOM	245	O	LEU	836	20.485	25.490	54.415	1.00	19.01
5	ATOM	246	N	GLY	837	20.091	25.803	52.272	1.00	16.84
	ATOM	247	H	GLY	837	20.463	25.798	51.374	1.00	0.00
	ATOM	248	CA	GLY	837	18.662	26.014	52.452	1.00	17.98
	ATOM	249	C	GLY	837	17.796	24.952	51.815	1.00	19.55
	ATOM	250	O	GLY	837	18.032	23.744	51.854	1.00	20.70
10	ATOM	251	N	LYS	838	16.774	25.360	51.132	1.00	19.89
	ATOM	252	H	LYS	838	16.669	26.315	50.997	1.00	0.00
	ATOM	253	CA	LYS	838	15.840	24.394	50.539	1.00	23.85
	ATOM	254	CB	LYS	838	14.507	25.191	50.446	1.00	29.81
	ATOM	255	CG	LYS	838	13.197	24.479	50.992	1.00	43.45
15	ATOM	256	CD	LYS	838	12.166	23.998	49.856	1.00	50.46
	ATOM	257	CE	LYS	838	10.942	23.041	50.220	1.00	54.44
	ATOM	258	NZ	LYS	838	9.625	23.712	50.403	1.00	55.92
	ATOM	259	HZ1	LYS	838	9.462	24.414	49.653	1.00	0.00
	ATOM	260	HZ2	LYS	838	9.627	24.194	51.325	1.00	0.00
20	ATOM	261	HZ3	LYS	838	8.855	23.012	50.391	1.00	0.00
	ATOM	262	C	LYS	838	16.285	23.741	49.223	1.00	22.22
	ATOM	263	O	LYS	838	17.103	24.294	48.478	1.00	20.55
	ATOM	264	N	PRO	839	15.745	22.577	48.854	1.00	21.48
	ATOM	265	CD	PRO	839	14.807	21.703	49.566	1.00	23.38
25	ATOM	266	CA	PRO	839	16.092	21.989	47.550	1.00	21.24
	ATOM	267	CB	PRO	839	15.638	20.528	47.646	1.00	22.83
	ATOM	268	CG	PRO	839	14.351	20.664	48.492	1.00	23.68
	ATOM	269	C	PRO	839	15.451	22.726	46.369	1.00	19.62
	ATOM	270	O	PRO	839	14.327	23.233	46.442	1.00	21.05
30	ATOM	271	N	LEU	840	16.248	22.929	45.320	1.00	17.59
	ATOM	272	H	LEU	840	17.194	22.744	45.456	1.00	0.00
	ATOM	273	CA	LEU	840	15.802	23.569	44.058	1.00	14.70
	ATOM	274	CB	LEU	840	16.941	24.543	43.565	1.00	10.40
	ATOM	275	CG	LEU	840	17.290	25.730	44.469	1.00	7.83
35	ATOM	276	CD1	LEU	840	18.426	26.530	43.831	1.00	4.45
	ATOM	277	CD2	LEU	840	16.044	26.592	44.692	1.00	7.37
	ATOM	278	C	LEU	840	15.495	22.415	43.048	1.00	15.32
	ATOM	279	O	LEU	840	14.775	22.535	42.060	1.00	16.37
	ATOM	280	N	GLY	841	16.128	21.249	43.247	1.00	15.72
40	ATOM	281	H	GLY	841	16.841	21.219	43.920	1.00	0.00
	ATOM	282	CA	GLY	841	15.865	20.059	42.423	1.00	13.49
	ATOM	283	C	GLY	841	16.456	18.774	43.026	1.00	15.33
	ATOM	284	O	GLY	841	17.524	18.770	43.638	1.00	13.64
	ATOM	285	N	ARG	842	15.776	17.648	42.875	1.00	15.48
45	ATOM	286	H	ARG	842	14.946	17.670	42.360	1.00	0.00
	ATOM	287	CA	ARG	842	16.303	16.362	43.366	1.00	16.74
	ATOM	288	CB	ARG	842	15.671	15.839	44.631	1.00	20.45
	ATOM	289	CG	ARG	842	15.346	16.933	45.576	1.00	29.34
	ATOM	290	CD	ARG	842	16.420	17.030	46.618	1.00	38.54
50	ATOM	291	NE	ARG	842	16.468	15.793	47.438	1.00	46.15
	ATOM	292	HE	ARG	842	17.172	15.141	47.243	1.00	0.00
	ATOM	293	CZ	ARG	842	15.607	15.513	48.429	1.00	48.47
	ATOM	294	NH1	ARG	842	14.601	16.357	48.743	1.00	50.37
	ATOM	295	HH11	ARG	842	14.488	17.211	48.234	1.00	0.00
55	ATOM	296	HH12	ARG	842	13.976	16.122	49.487	1.00	0.00
	ATOM	297	NH2	ARG	842	15.822	14.393	49.145	1.00	48.84
	ATOM	298	HH21	ARG	842	16.609	13.815	48.929	1.00	0.00
	ATOM	299	HH22	ARG	842	15.204	14.138	49.887	1.00	0.00
	ATOM	300	C	ARG	842	15.984	15.260	42.353	1.00	17.43
60	ATOM	301	O	ARG	842	14.931	15.200	41.689	1.00	16.93
	ATOM	302	N	GLY	843	16.935	14.384	42.180	1.00	13.93
	ATOM	303	H	GLY	843	17.743	14.461	42.727	1.00	0.00

	ATOM	304	CA	GLY	843	16.777	13.266	41.272	1.00	15.31
	ATOM	305	C	GLY	843	17.008	12.023	42.136	1.00	17.79
	ATOM	306	O	GLY	843	16.809	12.065	43.362	1.00	18.61
	ATOM	307	N	ALA	844	17.399	10.919	41.515	1.00	17.40
5	ATOM	308	H	ALA	844	17.558	10.953	40.550	1.00	0.00
	ATOM	309	CA	ALA	844	17.686	9.695	42.303	1.00	18.35
	ATOM	310	CB	ALA	844	17.782	8.457	41.400	1.00	17.59
	ATOM	311	C	ALA	844	18.992	9.731	43.120	1.00	16.76
	ATOM	312	O	ALA	844	19.019	9.292	44.278	1.00	17.78
10	ATOM	313	N	PHE	845	20.040	10.356	42.565	1.00	14.21
	ATOM	314	H	PHE	845	19.964	10.697	41.654	1.00	0.00
	ATOM	315	CA	PHE	845	21.364	10.363	43.245	1.00	15.00
	ATOM	316	CB	PHE	845	22.404	9.563	42.418	1.00	16.96
	ATOM	317	CG	PHE	845	21.888	8.231	42.039	1.00	16.54
15	ATOM	318	CD1	PHE	845	21.923	7.848	40.679	1.00	19.50
	ATOM	319	CD2	PHE	845	21.315	7.390	42.997	1.00	21.69
	ATOM	320	CE1	PHE	845	21.370	6.621	40.296	1.00	20.97
	ATOM	321	CE2	PHE	845	20.751	6.152	42.619	1.00	23.31
	ATOM	322	CZ	PHE	845	20.786	5.778	41.270	1.00	21.05
20	ATOM	323	C	PHE	845	21.964	11.717	43.496	1.00	13.67
	ATOM	324	O	PHE	845	22.938	11.869	44.220	1.00	11.56
	ATOM	325	N	GLY	846	21.307	12.739	42.975	1.00	14.40
	ATOM	326	H	GLY	846	20.441	12.575	42.550	1.00	0.00
	ATOM	327	CA	GLY	846	21.793	14.107	43.108	1.00	11.91
25	ATOM	328	C	GLY	846	20.703	15.111	43.373	1.00	10.53
	ATOM	329	O	GLY	846	19.523	14.833	43.267	1.00	9.77
	ATOM	330	N	GLN	847	21.133	16.307	43.727	1.00	9.97
	ATOM	331	H	GLN	847	22.097	16.450	43.835	1.00	0.00
	ATOM	332	CA	GLN	847	20.248	17.415	44.032	1.00	10.90
30	ATOM	333	CB	GLN	847	19.663	17.308	45.471	1.00	12.62
	ATOM	334	CG	GLN	847	20.799	17.254	46.512	1.00	12.61
	ATOM	335	CD	GLN	847	20.369	16.839	47.881	1.00	12.10
	ATOM	336	OE1	GLN	847	19.251	16.904	48.323	1.00	13.50
	ATOM	337	NE2	GLN	847	21.240	16.324	48.654	1.00	15.65
35	ATOM	338	HE21	GLN	847	22.171	16.186	48.388	1.00	0.00
	ATOM	339	HE22	GLN	847	20.906	16.075	49.530	1.00	0.00
	ATOM	340	C	GLN	847	20.986	18.728	43.957	1.00	11.32
	ATOM	341	O	GLN	847	22.227	18.817	43.982	1.00	11.52
	ATOM	342	N	VAL	848	20.166	19.738	43.714	1.00	12.63
40	ATOM	343	H	VAL	848	19.221	19.544	43.558	1.00	0.00
	ATOM	344	CA	VAL	848	20.652	21.117	43.675	1.00	13.38
	ATOM	345	CB	VAL	848	20.365	21.834	42.332	1.00	12.14
	ATOM	346	CG1	VAL	848	20.856	23.327	42.388	1.00	13.81
	ATOM	347	CG2	VAL	848	21.228	21.177	41.258	1.00	8.08
45	ATOM	348	C	VAL	848	19.915	21.852	44.805	1.00	13.65
	ATOM	349	O	VAL	848	18.674	21.843	44.866	1.00	15.41
	ATOM	350	N	ILE	849	20.653	22.397	45.751	1.00	12.17
	ATOM	351	H	ILE	849	21.628	22.282	45.765	1.00	0.00
	ATOM	352	CA	ILE	849	19.936	23.111	46.813	1.00	14.26
50	ATOM	353	CB	ILE	849	20.017	22.297	48.212	1.00	15.42
	ATOM	354	CG2	ILE	849	20.403	20.785	48.110	1.00	12.84
	ATOM	355	CG1	ILE	849	21.034	22.901	49.027	1.00	15.12
	ATOM	356	CD1	ILE	849	20.162	23.336	50.138	1.00	13.22
	ATOM	357	C	ILE	849	20.428	24.547	46.962	1.00	14.93
55	ATOM	358	O	ILE	849	21.601	24.901	46.712	1.00	14.17
	ATOM	359	N	GLU	850	19.465	25.392	47.291	1.00	13.78
	ATOM	360	H	GLU	850	18.587	25.024	47.509	1.00	0.00
	ATOM	361	CA	GLU	850	19.703	26.835	47.484	1.00	15.28
	ATOM	362	CB	GLU	850	18.396	27.544	47.763	1.00	19.32
60	ATOM	363	CG	GLU	850	18.512	29.035	47.463	1.00	22.72
	ATOM	364	CD	GLU	850	17.171	29.753	47.572	1.00	26.00
	ATOM	365	OE1	GLU	850	16.096	29.244	47.203	1.00	27.20

	ATOM	366	OE2	GLU	850	17.229	30.888	48.024	1.00	32.08
	ATOM	367	C	GLU	850	20.574	27.069	48.663	1.00	13.48
	ATOM	368	O	GLU	850	20.408	26.325	49.626	1.00	13.55
	ATOM	369	N	ALA	851	21.441	28.070	48.635	1.00	11.86
5	ATOM	370	H	ALA	851	21.528	28.593	47.816	1.00	0.00
	ATOM	371	CA	ALA	851	22.269	28.328	49.801	1.00	12.12
	ATOM	372	CB	ALA	851	23.582	27.512	49.826	1.00	8.80
	ATOM	373	C	ALA	851	22.661	29.757	49.891	1.00	13.21
	ATOM	374	O	ALA	851	22.384	30.561	49.016	1.00	14.66
10	ATOM	375	N	ASP	852	23.210	30.152	51.011	1.00	15.76
	ATOM	376	H	ASP	852	23.255	29.543	51.775	1.00	0.00
	ATOM	377	CA	ASP	852	23.636	31.532	51.154	1.00	17.73
	ATOM	378	CB	ASP	852	22.583	32.143	52.148	1.00	23.56
	ATOM	379	CG	ASP	852	21.234	32.367	51.262	1.00	37.72
15	ATOM	380	OD1	ASP	852	20.414	31.405	51.048	1.00	41.02
	ATOM	381	OD2	ASP	852	21.038	33.513	50.744	1.00	37.09
	ATOM	382	C	ASP	852	25.070	31.462	51.532	1.00	15.88
	ATOM	383	O	ASP	852	25.485	30.846	52.514	1.00	17.76
	ATOM	384	N	ALA	853	25.888	31.760	50.544	1.00	14.45
20	ATOM	385	H	ALA	853	25.485	32.011	49.691	1.00	0.00
	ATOM	386	CA	ALA	853	27.352	31.734	50.686	1.00	13.68
	ATOM	387	CB	ALA	853	28.061	31.360	49.351	1.00	10.34
	ATOM	388	C	ALA	853	27.996	33.046	51.141	1.00	15.34
	ATOM	389	O	ALA	853	27.820	34.085	50.488	1.00	17.75
25	ATOM	390	N	PHE	854	28.755	33.050	52.236	1.00	12.76
	ATOM	391	H	PHE	854	28.883	32.196	52.698	1.00	0.00
	ATOM	392	CA	PHE	854	29.401	34.239	52.730	1.00	11.10
	ATOM	393	CB	PHE	854	29.631	34.095	54.243	1.00	11.64
	ATOM	394	CG	PHE	854	30.028	35.424	54.752	1.00	13.57
30	ATOM	395	CD1	PHE	854	31.377	35.731	55.041	1.00	17.21
	ATOM	396	CD2	PHE	854	29.043	36.392	54.982	1.00	14.89
	ATOM	397	CE1	PHE	854	31.755	36.986	55.562	1.00	17.08
	ATOM	398	CE2	PHE	854	29.406	37.641	55.498	1.00	14.87
	ATOM	399	CZ	PHE	854	30.741	37.935	55.788	1.00	14.88
35	ATOM	400	C	PHE	854	30.700	34.576	52.030	1.00	10.52
	ATOM	401	O	PHE	854	31.728	33.911	52.162	1.00	10.77
	ATOM	402	N	GLY	855	30.696	35.638	51.259	1.00	10.04
	ATOM	403	H	GLY	855	29.856	36.127	51.161	1.00	0.00
	ATOM	404	CA	GLY	855	31.917	36.067	50.565	1.00	13.07
40	ATOM	405	C	GLY	855	32.471	35.179	49.464	1.00	14.16
	ATOM	406	O	GLY	855	33.677	35.205	49.206	1.00	15.80
	ATOM	407	N	ILE	856	31.626	34.428	48.764	1.00	15.66
	ATOM	408	H	ILE	856	30.746	34.261	49.143	1.00	0.00
	ATOM	409	CA	ILE	856	32.123	33.566	47.639	1.00	15.67
45	ATOM	410	CB	ILE	856	30.961	32.543	47.180	1.00	15.47
	ATOM	411	CG2	ILE	856	29.772	33.170	46.364	1.00	10.66
	ATOM	412	CG1	ILE	856	31.749	31.392	46.430	1.00	14.48
	ATOM	413	CD1	ILE	856	30.901	30.100	46.336	1.00	11.81
	ATOM	414	C	ILE	856	32.643	34.375	46.443	1.00	16.95
50	ATOM	415	O	ILE	856	33.679	34.024	45.916	1.00	18.94
	ATOM	416	N	ASP	857	31.988	35.435	45.956	1.00	17.76
	ATOM	417	H	ASP	857	31.130	35.684	46.356	1.00	0.00
	ATOM	418	CA	ASP	857	32.471	36.205	44.800	1.00	22.15
	ATOM	419	CB	ASP	857	31.416	36.077	43.634	1.00	22.91
55	ATOM	420	CG	ASP	857	29.972	36.567	43.842	1.00	28.46
	ATOM	421	OD1	ASP	857	29.653	37.229	44.843	1.00	30.58
	ATOM	422	OD2	ASP	857	29.137	36.271	42.967	1.00	28.52
	ATOM	423	C	ASP	857	32.823	37.701	45.065	1.00	23.50
	ATOM	424	O	ASP	857	33.346	38.433	44.233	1.00	26.74
60	ATOM	425	N	LYS	858	32.536	38.189	46.266	1.00	25.16
	ATOM	426	H	LYS	858	31.989	37.632	46.863	1.00	0.00
	ATOM	427	CA	LYS	858	32.819	39.574	46.700	1.00	22.69

	ATOM	428	CB	LYS	858	31.640	40.451	46.284	1.00	26.17
	ATOM	429	CG	LYS	858	31.851	41.982	46.208	1.00	29.21
	ATOM	430	CD	LYS	858	30.461	42.663	45.970	1.00	29.77
	ATOM	431	CE	LYS	858	30.508	44.123	46.442	1.00	30.78
5	ATOM	432	NZ	LYS	858	29.148	44.686	46.369	1.00	35.10
	ATOM	433	HZ1	LYS	858	28.557	44.043	46.930	1.00	0.00
	ATOM	434	HZ2	LYS	858	28.796	44.727	45.393	1.00	0.00
	ATOM	435	HZ3	LYS	858	29.135	45.634	46.801	1.00	0.00
	ATOM	436	C	LYS	858	33.000	39.556	48.218	1.00	19.72
10	ATOM	437	O	LYS	858	32.219	39.020	49.020	1.00	14.81
	ATOM	438	N	THR	859	34.147	40.067	48.592	1.00	18.54
	ATOM	439	H	THR	859	34.810	40.335	47.915	1.00	0.00
	ATOM	440	CA	THR	859	34.518	40.087	50.006	1.00	20.31
	ATOM	441	CB	THR	859	35.717	41.058	50.289	1.00	23.50
15	ATOM	442	OG1	THR	859	36.785	40.568	49.455	1.00	26.68
	ATOM	443	HG1	THR	859	37.587	41.069	49.635	1.00	0.00
	ATOM	444	CG2	THR	859	36.231	41.102	51.784	1.00	21.86
	ATOM	445	C	THR	859	33.437	40.472	50.960	1.00	18.91
	ATOM	446	O	THR	859	32.765	41.471	50.793	1.00	18.82
20	ATOM	447	N	ALA	860	33.310	39.675	51.999	1.00	17.61
	ATOM	448	H	ALA	860	33.869	38.873	51.981	1.00	0.00
	ATOM	449	CA	ALA	860	32.363	39.866	53.106	1.00	15.98
	ATOM	450	CB	ALA	860	32.969	40.993	53.998	1.00	11.93
	ATOM	451	C	ALA	860	30.900	40.128	52.712	1.00	15.25
25	ATOM	452	O	ALA	860	30.137	40.811	53.396	1.00	15.10
	ATOM	453	N	THR	861	30.440	39.550	51.594	1.00	16.85
	ATOM	454	H	THR	861	31.061	39.161	50.946	1.00	0.00
	ATOM	455	CA	THR	861	29.016	39.733	51.220	1.00	16.36
	ATOM	456	CB	THR	861	28.884	40.855	50.011	1.00	17.08
30	ATOM	457	OG1	THR	861	28.276	40.334	48.849	1.00	22.00
	ATOM	458	HG1	THR	861	28.005	41.045	48.250	1.00	0.00
	ATOM	459	CG2	THR	861	30.189	41.440	49.617	1.00	11.87
	ATOM	460	C	THR	861	28.285	38.410	50.920	1.00	14.34
	ATOM	461	O	THR	861	28.873	37.471	50.353	1.00	11.67
35	ATOM	462	N	CYS	862	27.087	38.228	51.566	1.00	15.84
	ATOM	463	H	CYS	862	26.699	39.027	51.972	1.00	0.00
	ATOM	464	CA	CYS	862	26.264	36.970	51.359	1.00	20.79
	ATOM	465	CB	CYS	862	24.842	36.640	52.001	1.00	25.92
	ATOM	466	SG	CYS	862	24.173	34.802	52.280	1.00	42.81
40	ATOM	467	C	CYS	862	25.770	37.010	49.959	1.00	18.96
	ATOM	468	O	CYS	862	25.475	38.058	49.383	1.00	16.49
	ATOM	469	N	ARG	863	25.649	35.799	49.463	1.00	17.65
	ATOM	470	H	ARG	863	25.901	35.030	50.022	1.00	0.00
	ATOM	471	CA	ARG	863	25.245	35.621	48.083	1.00	16.24
45	ATOM	472	CB	ARG	863	26.579	35.597	47.344	1.00	17.23
	ATOM	473	CG	ARG	863	26.682	35.004	45.966	1.00	26.00
	ATOM	474	CD	ARG	863	25.756	35.667	44.946	1.00	33.54
	ATOM	475	NE	ARG	863	26.366	35.568	43.586	1.00	40.58
	ATOM	476	HE	ARG	863	27.258	35.945	43.519	1.00	0.00
50	ATOM	477	CZ	ARG	863	25.858	34.958	42.454	1.00	43.27
	ATOM	478	NH1	ARG	863	26.693	35.090	41.390	1.00	40.59
	ATOM	479	HH11	ARG	863	27.561	35.574	41.501	1.00	0.00
	ATOM	480	HH12	ARG	863	26.426	34.706	40.507	1.00	0.00
	ATOM	481	NH2	ARG	863	24.661	34.218	42.381	1.00	37.02
55	ATOM	482	HH21	ARG	863	24.114	34.069	43.207	1.00	0.00
	ATOM	483	HH22	ARG	863	24.356	33.833	41.508	1.00	0.00
	ATOM	484	C	ARG	863	24.456	34.357	48.021	1.00	14.76
	ATOM	485	O	ARG	863	24.909	33.332	48.547	1.00	13.12
	ATOM	486	N	THR	864	23.208	34.465	47.571	1.00	13.08
60	ATOM	487	H	THR	864	22.791	35.355	47.502	1.00	0.00
	ATOM	488	CA	THR	864	22.398	33.247	47.381	1.00	12.56
	ATOM	489	CB	THR	864	20.956	33.491	47.028	1.00	11.92



	ATOM	490	OG1	THR	864	20.417	34.401	47.975	1.00	16.23
	ATOM	491	HG1	THR	864	19.553	34.719	47.664	1.00	0.00
	ATOM	492	CG2	THR	864	20.198	32.151	47.019	1.00	7.87
	ATOM	493	C	THR	864	22.968	32.543	46.179	1.00	12.61
5	ATOM	494	O	THR	864	23.130	33.081	45.079	1.00	11.21
	ATOM	495	N	VAL	865	23.294	31.299	46.398	1.00	13.02
	ATOM	496	H	VAL	865	23.101	30.952	47.294	1.00	0.00
	ATOM	497	CA	VAL	865	23.883	30.421	45.360	1.00	12.23
	ATOM	498	CB	VAL	865	25.427	30.104	45.705	1.00	11.27
10	ATOM	499	CG1	VAL	865	26.233	31.371	45.710	1.00	7.29
	ATOM	500	CG2	VAL	865	25.540	29.348	47.055	1.00	9.31
	ATOM	501	C	VAL	865	23.083	29.080	45.184	1.00	11.12
	ATOM	502	O	VAL	865	22.162	28.806	45.958	1.00	9.32
	ATOM	503	N	ALA	866	23.397	28.291	44.126	1.00	9.71
15	ATOM	504	H	ALA	866	24.114	28.613	43.534	1.00	0.00
	ATOM	505	CA	ALA	866	22.757	26.964	43.852	1.00	9.86
	ATOM	506	CB	ALA	866	22.191	26.838	42.427	1.00	3.58
	ATOM	507	C	ALA	866	23.881	25.890	43.961	1.00	10.40
	ATOM	508	O	ALA	866	24.958	26.007	43.345	1.00	11.34
20	ATOM	509	N	VAL	867	23.803	24.914	44.879	1.00	11.39
	ATOM	510	H	VAL	867	23.043	24.868	45.492	1.00	0.00
	ATOM	511	CA	VAL	867	24.899	23.910	44.942	1.00	11.20
	ATOM	512	CB	VAL	867	25.731	23.966	46.387	1.00	13.31
	ATOM	513	CG1	VAL	867	25.155	25.087	47.265	1.00	9.88
25	ATOM	514	CG2	VAL	867	25.850	22.603	47.025	1.00	9.49
	ATOM	515	C	VAL	867	24.427	22.494	44.621	1.00	11.75
	ATOM	516	O	VAL	867	23.360	22.019	45.042	1.00	12.12
	ATOM	517	N	LYS	868	25.103	21.955	43.627	1.00	11.96
	ATOM	518	H	LYS	868	25.793	22.485	43.188	1.00	0.00
30	ATOM	519	CA	LYS	868	24.829	20.586	43.249	1.00	10.22
	ATOM	520	CB	LYS	868	25.108	20.360	41.760	1.00	10.01
	ATOM	521	CG	LYS	868	24.680	18.990	41.275	1.00	8.60
	ATOM	522	CD	LYS	868	24.767	18.718	39.772	1.00	8.46
	ATOM	523	CE	LYS	868	23.832	19.521	38.883	1.00	7.23
35	ATOM	524	NZ	LYS	868	24.249	19.196	37.523	1.00	2.40
	ATOM	525	HZ1	LYS	868	24.311	18.164	37.432	1.00	0.00
	ATOM	526	HZ2	LYS	868	25.167	19.641	37.332	1.00	0.00
	ATOM	527	HZ3	LYS	868	23.548	19.574	36.859	1.00	0.00
	ATOM	528	C	LYS	868	25.737	19.706	44.086	1.00	8.09
40	ATOM	529	O	LYS	868	26.900	19.973	44.365	1.00	6.58
	ATOM	530	N	MET	869	25.103	18.716	44.673	1.00	8.98
	ATOM	531	H	MET	869	24.136	18.662	44.540	1.00	0.00
	ATOM	532	CA	MET	869	25.751	17.694	45.508	1.00	8.78
	ATOM	533	CB	MET	869	25.858	18.161	47.012	1.00	6.48
45	ATOM	534	CG	MET	869	24.477	18.368	47.629	1.00	4.78
	ATOM	535	SD	MET	869	24.505	18.947	49.342	1.00	16.24
	ATOM	536	CE	MET	869	25.087	17.411	50.175	1.00	15.26
	ATOM	537	C	MET	869	24.898	16.405	45.402	1.00	9.62
	ATOM	538	O	MET	869	23.834	16.320	44.774	1.00	10.23
50	ATOM	539	N	LEU	870	25.409	15.315	45.943	1.00	11.89
	ATOM	540	H	LEU	870	26.369	15.333	46.100	1.00	0.00
	ATOM	541	CA	LEU	870	24.695	14.043	45.907	1.00	11.08
	ATOM	542	CB	LEU	870	25.809	12.955	45.753	1.00	10.34
	ATOM	543	CG	LEU	870	26.798	13.111	44.486	1.00	7.85
55	ATOM	544	CD1	LEU	870	27.816	11.941	44.454	1.00	3.69
	ATOM	545	CD2	LEU	870	26.017	13.124	43.173	1.00	9.28
	ATOM	546	C	LEU	870	23.770	13.849	47.099	1.00	10.27
	ATOM	547	O	LEU	870	23.733	14.642	48.046	1.00	7.60
	ATOM	548	N	LYS	871	23.020	12.773	47.044	1.00	10.68
60	ATOM	549	H	LYS	871	23.098	12.178	46.270	1.00	0.00
	ATOM	550	CA	LYS	871	22.032	12.393	48.067	1.00	11.52
	ATOM	551	CB	LYS	871	20.599	12.814	47.681	1.00	12.77

	ATOM	552	CG	LYS	871	20.221	12.491	46.261	1.00	14.47
	ATOM	553	CD	LYS	871	18.814	12.937	46.117	1.00	20.92
	ATOM	554	CE	LYS	871	17.869	12.181	47.033	1.00	23.93
	ATOM	555	NZ	LYS	871	17.944	10.728	46.784	1.00	27.94
5	ATOM	556	HZ1	LYS	871	18.748	10.360	47.329	1.00	0.00
	ATOM	557	HZ2	LYS	871	18.047	10.517	45.771	1.00	0.00
	ATOM	558	HZ3	LYS	871	17.053	10.307	47.124	1.00	0.00
	ATOM	559	C	LYS	871	22.014	10.910	48.242	1.00	10.87
	ATOM	560	O	LYS	871	22.693	10.189	47.551	1.00	11.38
10	ATOM	561	N	GLU	872	21.275	10.433	49.214	1.00	12.08
	ATOM	562	H	GLU	872	20.845	11.060	49.812	1.00	0.00
	ATOM	563	CA	GLU	872	21.136	9.005	49.477	1.00	12.03
	ATOM	564	CB	GLU	872	19.993	8.864	50.503	1.00	12.52
	ATOM	565	CG	GLU	872	19.596	7.412	50.841	1.00	23.29
15	ATOM	566	CD	GLU	872	20.769	6.524	51.442	1.00	27.30
	ATOM	567	OE1	GLU	872	20.756	5.319	51.116	1.00	30.11
	ATOM	568	OE2	GLU	872	21.644	6.998	52.221	1.00	31.07
	ATOM	569	C	GLU	872	20.853	8.240	48.189	1.00	12.13
	ATOM	570	O	GLU	872	19.972	8.613	47.406	1.00	11.81
20	ATOM	571	N	GLY	873	21.605	7.157	47.944	1.00	11.44
	ATOM	572	H	GLY	873	22.385	6.991	48.510	1.00	0.00
	ATOM	573	CA	GLY	873	21.371	6.412	46.704	1.00	11.90
	ATOM	574	C	GLY	873	22.622	6.493	45.857	1.00	11.57
	ATOM	575	O	GLY	873	22.945	5.574	45.116	1.00	12.20
25	ATOM	576	N	ALA	874	23.274	7.645	45.860	1.00	12.84
	ATOM	577	H	ALA	874	22.891	8.400	46.354	1.00	0.00
	ATOM	578	CA	ALA	874	24.529	7.805	45.124	1.00	13.93
	ATOM	579	CB	ALA	874	25.014	9.269	45.162	1.00	14.14
	ATOM	580	C	ALA	874	25.668	6.906	45.693	1.00	14.11
30	ATOM	581	O	ALA	874	25.764	6.530	46.873	1.00	12.53
	ATOM	582	N	THR	875	26.632	6.589	44.812	1.00	12.98
	ATOM	583	H	THR	875	26.641	7.068	43.975	1.00	0.00
	ATOM	584	CA	THR	875	27.759	5.726	45.140	1.00	11.86
	ATOM	585	CB	THR	875	27.641	4.390	44.349	1.00	14.90
35	ATOM	586	OG1	THR	875	27.934	4.704	42.976	1.00	14.75
	ATOM	587	HG1	THR	875	27.518	4.039	42.414	1.00	0.00
	ATOM	588	CG2	THR	875	26.234	3.718	44.434	1.00	13.55
	ATOM	589	C	THR	875	29.002	6.441	44.713	1.00	12.64
	ATOM	590	O	THR	875	28.887	7.513	44.103	1.00	9.74
40	ATOM	591	N	HIS	876	30.194	5.856	44.906	1.00	11.03
	ATOM	592	H	HIS	876	30.223	4.988	45.370	1.00	0.00
	ATOM	593	CA	HIS	876	31.444	6.519	44.505	1.00	14.10
	ATOM	594	C	HIS	876	31.477	6.822	43.029	1.00	13.16
	ATOM	595	O	HIS	876	32.194	7.716	42.624	1.00	13.12
45	ATOM	596	CB	HIS	876	32.705	5.676	44.898	1.00	21.58
	ATOM	597	CG	HIS	876	33.979	6.352	44.372	1.00	35.85
	ATOM	598	ND1	HIS	876	34.370	7.682	44.526	1.00	37.81
	ATOM	599	HD1	HIS	876	33.912	8.323	45.105	1.00	0.00
	ATOM	600	CD2	HIS	876	35.062	5.744	43.665	1.00	39.00
50	ATOM	601	NE2	HIS	876	36.077	6.624	43.386	1.00	38.34
	ATOM	602	CE1	HIS	876	35.628	7.831	43.934	1.00	40.44
	ATOM	603	N	SER	877	30.754	6.129	42.175	1.00	13.37
	ATOM	604	H	SER	877	30.196	5.390	42.499	1.00	0.00
	ATOM	605	CA	SER	877	30.765	6.496	40.745	1.00	14.35
55	ATOM	606	CB	SER	877	30.200	5.338	39.797	1.00	18.27
	ATOM	607	OG	SER	877	28.880	4.831	40.076	1.00	24.23
	ATOM	608	HG	SER	877	28.552	4.369	39.295	1.00	0.00
	ATOM	609	C	SER	877	29.984	7.808	40.535	1.00	13.40
	ATOM	610	O	SER	877	30.405	8.594	39.702	1.00	12.57
60	ATOM	611	N	GLU	878	28.888	8.153	41.215	1.00	11.17
	ATOM	612	H	GLU	878	28.495	7.492	41.824	1.00	0.00
	ATOM	613	CA	GLU	878	28.285	9.486	40.990	1.00	10.51

	ATOM	614	CB	GLU	878	26.917	9.609	41.670	1.00	10.65
	ATOM	615	CG	GLU	878	25.748	8.988	40.919	1.00	10.67
	ATOM	616	CD	GLU	878	25.796	7.474	41.022	1.00	15.84
	ATOM	617	OE1	GLU	878	26.239	6.881	42.006	1.00	15.83
5	ATOM	618	OE2	GLU	878	25.371	6.835	40.085	1.00	18.23
	ATOM	619	C	GLU	878	29.227	10.569	41.582	1.00	11.07
	ATOM	620	O	GLU	878	29.356	11.691	41.125	1.00	10.59
	ATOM	621	N	HIS	879	29.932	10.228	42.625	1.00	9.65
	ATOM	622	H	HIS	879	29.715	9.370	43.049	1.00	0.00
10	ATOM	623	CA	HIS	879	30.901	11.106	43.263	1.00	10.11
	ATOM	624	C	HIS	879	32.013	11.392	42.256	1.00	9.37
	ATOM	625	O	HIS	879	32.428	12.546	42.076	1.00	8.98
	ATOM	626	CB	HIS	879	31.344	10.334	44.514	1.00	11.24
	ATOM	627	CG	HIS	879	32.196	11.185	45.308	1.00	14.65
15	ATOM	628	ND1	HIS	879	33.533	10.974	45.448	1.00	17.57
	ATOM	629	HD1	HIS	879	34.092	10.374	44.912	1.00	0.00
	ATOM	630	CD2	HIS	879	31.827	12.319	46.032	1.00	14.39
	ATOM	631	NE2	HIS	879	32.966	12.779	46.619	1.00	15.92
	ATOM	632	CE1	HIS	879	34.012	11.964	46.258	1.00	16.03
20	ATOM	633	N	ARG	880	32.554	10.351	41.605	1.00	9.51
	ATOM	634	H	ARG	880	32.308	9.442	41.850	1.00	0.00
	ATOM	635	CA	ARG	880	33.592	10.566	40.530	1.00	12.66
	ATOM	636	CB	ARG	880	34.042	9.208	39.925	1.00	14.20
	ATOM	637	CG	ARG	880	35.066	8.405	40.717	1.00	17.16
25	ATOM	638	CD	ARG	880	35.655	7.236	39.888	1.00	19.04
	ATOM	639	NE	ARG	880	34.589	6.255	39.714	1.00	26.91
	ATOM	640	HE	ARG	880	33.843	6.440	39.107	1.00	0.00
	ATOM	641	CZ	ARG	880	34.550	5.149	40.445	1.00	26.35
	ATOM	642	NH1	ARG	880	33.562	4.284	40.319	1.00	27.36
30	ATOM	643	HH11	ARG	880	32.806	4.449	39.688	1.00	0.00
	ATOM	644	HH12	ARG	880	33.581	3.463	40.888	1.00	0.00
	ATOM	645	NH2	ARG	880	35.556	4.843	41.223	1.00	29.03
	ATOM	646	HH21	ARG	880	36.359	5.443	41.272	1.00	0.00
	ATOM	647	HH22	ARG	880	35.547	4.012	41.777	1.00	0.00
35	ATOM	648	C	ARG	880	32.994	11.454	39.374	1.00	11.85
	ATOM	649	O	ARG	880	33.577	12.438	38.897	1.00	14.30
	ATOM	650	N	ALA	881	31.743	11.183	38.915	1.00	11.66
	ATOM	651	H	ALA	881	31.284	10.414	39.302	1.00	0.00
	ATOM	652	CA	ALA	881	31.039	11.964	37.856	1.00	10.87
40	ATOM	653	CB	ALA	881	29.630	11.477	37.566	1.00	9.47
	ATOM	654	C	ALA	881	30.845	13.425	38.246	1.00	11.23
	ATOM	655	O	ALA	881	30.994	14.313	37.420	1.00	13.17
	ATOM	656	N	LEU	882	30.509	13.728	39.508	1.00	9.60
	ATOM	657	H	LEU	882	30.355	12.980	40.122	1.00	0.00
45	ATOM	658	CA	LEU	882	30.343	15.130	39.970	1.00	11.33
	ATOM	659	CB	LEU	882	29.724	15.128	41.388	1.00	8.25
	ATOM	660	CG	LEU	882	29.315	16.528	41.886	1.00	7.05
	ATOM	661	CD1	LEU	882	28.370	17.285	40.847	1.00	5.97
	ATOM	662	CD2	LEU	882	28.651	16.284	43.287	1.00	5.76
50	ATOM	663	C	LEU	882	31.700	15.907	39.947	1.00	11.93
	ATOM	664	O	LEU	882	31.802	17.058	39.526	1.00	13.05
	ATOM	665	N	MET	883	32.795	15.275	40.390	1.00	13.15
	ATOM	666	H	MET	883	32.654	14.379	40.774	1.00	0.00
	ATOM	667	CA	MET	883	34.147	15.835	40.382	1.00	12.66
55	ATOM	668	CB	MET	883	35.115	14.810	40.970	1.00	12.91
	ATOM	669	CG	MET	883	36.551	15.377	41.020	1.00	17.19
	ATOM	670	SD	MET	883	36.853	17.015	41.856	1.00	23.56
	ATOM	671	CE	MET	883	36.205	16.532	43.404	1.00	19.99
	ATOM	672	C	MET	883	34.523	16.115	38.936	1.00	12.45
60	ATOM	673	O	MET	883	34.994	17.195	38.587	1.00	11.36
	ATOM	674	N	SER	884	34.310	15.169	38.028	1.00	11.85
	ATOM	675	H	SER	884	33.948	14.291	38.272	1.00	0.00

	ATOM	676	CA	SER	884	34.679	15.483	36.638	1.00	14.38
	ATOM	677	CB	SER	884	34.705	14.107	35.779	1.00	12.00
	ATOM	678	OG	SER	884	33.419	13.932	35.229	1.00	26.31
	ATOM	679	HG	SER	884	33.359	13.051	34.848	1.00	0.00
5	ATOM	680	C	SER	884	33.758	16.618	36.084	1.00	13.88
	ATOM	681	O	SER	884	34.194	17.406	35.231	1.00	14.26
	ATOM	682	N	GLU	885	32.521	16.857	36.599	1.00	11.86
	ATOM	683	H	GLU	885	32.155	16.184	37.209	1.00	0.00
	ATOM	684	CA	GLU	885	31.637	17.977	36.155	1.00	10.69
10	ATOM	685	CB	GLU	885	30.214	17.780	36.703	1.00	11.58
	ATOM	686	CG	GLU	885	29.337	19.045	36.659	1.00	11.18
	ATOM	687	CD	GLU	885	27.891	18.756	37.023	1.00	12.41
	ATOM	688	OE1	GLU	885	27.548	17.627	37.362	1.00	15.34
	ATOM	689	OE2	GLU	885	27.090	19.676	36.925	1.00	10.58
15	ATOM	690	C	GLU	885	32.197	19.303	36.636	1.00	8.77
	ATOM	691	O	GLU	885	32.131	20.355	35.997	1.00	9.14
	ATOM	692	N	LEU	886	32.736	19.298	37.833	1.00	9.63
	ATOM	693	H	LEU	886	32.592	18.513	38.394	1.00	0.00
	ATOM	694	CA	LEU	886	33.423	20.464	38.414	1.00	9.82
20	ATOM	695	CB	LEU	886	33.886	20.070	39.874	1.00	8.32
	ATOM	696	CG	LEU	886	34.915	20.999	40.584	1.00	6.06
	ATOM	697	CD1	LEU	886	34.313	22.417	40.568	1.00	6.33
	ATOM	698	CD2	LEU	886	35.319	20.464	41.990	1.00	4.44
	ATOM	699	C	LEU	886	34.633	20.810	37.508	1.00	8.94
25	ATOM	700	O	LEU	886	34.904	21.957	37.149	1.00	9.81
	ATOM	701	N	LYS	887	35.433	19.803	37.095	1.00	11.55
	ATOM	702	H	LYS	887	35.268	18.909	37.447	1.00	0.00
	ATOM	703	CA	LYS	887	36.631	20.036	36.233	1.00	10.60
	ATOM	704	CB	LYS	887	37.360	18.715	36.003	1.00	8.26
30	ATOM	705	CG	LYS	887	38.208	18.552	37.279	1.00	9.43
	ATOM	706	CD	LYS	887	38.563	17.086	37.312	1.00	10.42
	ATOM	707	CE	LYS	887	39.439	16.661	38.477	1.00	13.75
	ATOM	708	NZ	LYS	887	39.705	15.217	38.268	1.00	17.49
	ATOM	709	HZ1	LYS	887	40.065	15.086	37.301	1.00	0.00
35	ATOM	710	HZ2	LYS	887	38.823	14.686	38.407	1.00	0.00
	ATOM	711	HZ3	LYS	887	40.425	14.886	38.943	1.00	0.00
	ATOM	712	C	LYS	887	36.204	20.638	34.894	1.00	12.30
	ATOM	713	O	LYS	887	36.713	21.645	34.392	1.00	13.21
	ATOM	714	N	ILE	888	35.196	20.066	34.281	1.00	12.34
40	ATOM	715	H	ILE	888	34.817	19.262	34.647	1.00	0.00
	ATOM	716	CA	ILE	888	34.749	20.621	32.986	1.00	13.85
	ATOM	717	CB	ILE	888	33.654	19.687	32.213	1.00	14.25
	ATOM	718	CG2	ILE	888	32.217	19.810	32.662	1.00	11.68
	ATOM	719	CG1	ILE	888	33.688	20.187	30.707	1.00	15.34
45	ATOM	720	CD1	ILE	888	35.039	19.917	29.937	1.00	14.57
	ATOM	721	C	ILE	888	34.207	22.037	33.168	1.00	14.30
	ATOM	722	O	ILE	888	34.554	22.909	32.370	1.00	15.86
	ATOM	723	N	LEU	889	33.396	22.348	34.189	1.00	14.18
	ATOM	724	H	LEU	889	33.078	21.643	34.786	1.00	0.00
50	ATOM	725	CA	LEU	889	32.905	23.722	34.391	1.00	11.22
	ATOM	726	CB	LEU	889	32.021	23.806	35.674	1.00	14.31
	ATOM	727	CG	LEU	889	30.644	23.171	35.448	1.00	13.24
	ATOM	728	CD1	LEU	889	29.906	23.057	36.772	1.00	11.60
	ATOM	729	CD2	LEU	889	29.884	24.034	34.467	1.00	15.26
55	ATOM	730	C	LEU	889	34.056	24.693	34.517	1.00	10.26
	ATOM	731	O	LEU	889	33.872	25.847	34.156	1.00	8.28
	ATOM	732	N	ILE	890	35.185	24.281	35.139	1.00	10.99
	ATOM	733	H	ILE	890	35.195	23.378	35.535	1.00	0.00
	ATOM	734	CA	ILE	890	36.363	25.130	35.282	1.00	9.57
60	ATOM	735	CB	ILE	890	37.400	24.419	36.183	1.00	9.63
	ATOM	736	CG2	ILE	890	38.693	25.280	36.075	1.00	8.92
	ATOM	737	CG1	ILE	890	36.945	24.288	37.710	1.00	7.16

	ATOM	738	CD1	ILE	890	37.959	23.632	38.679	1.00	3.52
	ATOM	739	C	ILE	890	36.905	25.379	33.861	1.00	11.19
	ATOM	740	O	ILE	890	37.154	26.529	33.492	1.00	10.84
	ATOM	741	N	HIS	891	37.004	24.346	33.023	1.00	10.50
5	ATOM	742	H	HIS	891	36.844	23.449	33.396	1.00	0.00
	ATOM	743	CA	HIS	891	37.504	24.516	31.653	1.00	11.48
	ATOM	744	C	HIS	891	36.582	25.401	30.850	1.00	11.68
	ATOM	745	O	HIS	891	36.992	26.304	30.148	1.00	11.27
	ATOM	746	CB	HIS	891	37.629	23.121	31.091	1.00	12.09
10	ATOM	747	CG	HIS	891	37.646	23.232	29.637	1.00	16.19
	ATOM	748	ND1	HIS	891	38.729	23.607	28.914	1.00	15.09
	ATOM	749	CE1	HIS	891	38.329	23.649	27.590	1.00	13.72
	ATOM	750	CD2	HIS	891	36.553	23.020	28.765	1.00	15.26
	ATOM	751	NE2	HIS	891	37.006	23.279	27.525	1.00	15.01
15	ATOM	752	HE2	HIS	891	36.498	23.200	26.718	1.00	0.00
	ATOM	753	N	ILE	892	35.270	25.162	30.882	1.00	11.52
	ATOM	754	H	ILE	892	34.955	24.441	31.442	1.00	0.00
	ATOM	755	CA	ILE	892	34.327	25.990	30.156	1.00	8.99
	ATOM	756	CB	ILE	892	32.863	25.478	30.495	1.00	9.17
20	ATOM	757	CG2	ILE	892	31.863	26.603	30.148	1.00	7.47
	ATOM	758	CG1	ILE	892	32.536	24.105	29.779	1.00	6.76
	ATOM	759	CD1	ILE	892	31.391	23.281	30.526	1.00	6.58
	ATOM	760	C	ILE	892	34.526	27.465	30.570	1.00	10.35
	ATOM	761	O	ILE	892	34.673	28.345	29.758	1.00	8.76
25	ATOM	762	N	GLY	893	34.570	27.829	31.851	1.00	11.62
	ATOM	763	H	GLY	893	34.598	27.118	32.530	1.00	0.00
	ATOM	764	CA	GLY	893	34.693	29.237	32.254	1.00	11.93
	ATOM	765	C	GLY	893	33.344	30.057	32.270	1.00	14.13
	ATOM	766	O	GLY	893	32.206	29.576	32.137	1.00	15.49
30	ATOM	767	N	HIS	894	33.435	31.369	32.377	1.00	11.26
	ATOM	768	H	HIS	894	34.278	31.761	32.125	1.00	0.00
	ATOM	769	CA	HIS	894	32.236	32.184	32.469	1.00	10.93
	ATOM	770	C	HIS	894	31.743	32.926	31.246	1.00	10.39
	ATOM	771	O	HIS	894	32.500	33.459	30.429	1.00	12.57
35	ATOM	772	CB	HIS	894	32.450	33.194	33.681	1.00	13.57
	ATOM	773	CG	HIS	894	33.691	34.071	33.601	1.00	14.89
	ATOM	774	ND1	HIS	894	33.744	35.299	33.019	1.00	16.04
	ATOM	775	CE1	HIS	894	35.058	35.749	33.011	1.00	14.74
	ATOM	776	CD2	HIS	894	35.031	33.792	33.960	1.00	15.50
40	ATOM	777	NE2	HIS	894	35.860	34.823	33.599	1.00	15.53
	ATOM	778	HE2	HIS	894	36.797	34.977	33.854	1.00	0.00
	ATOM	779	N	HIS	895	30.421	33.063	31.213	1.00	9.72
	ATOM	780	H	HIS	895	29.897	32.569	31.885	1.00	0.00
	ATOM	781	CA	HIS	895	29.737	33.790	30.154	1.00	8.97
45	ATOM	782	C	HIS	895	28.436	34.180	30.750	1.00	8.86
	ATOM	783	O	HIS	895	27.906	33.479	31.593	1.00	11.39
	ATOM	784	CB	HIS	895	29.506	32.881	28.912	1.00	9.29
	ATOM	785	CG	HIS	895	28.820	33.609	27.852	1.00	12.10
	ATOM	786	ND1	HIS	895	27.467	33.723	27.729	1.00	13.34
50	ATOM	787	CE1	HIS	895	27.204	34.473	26.628	1.00	12.38
	ATOM	788	CD2	HIS	895	29.407	34.309	26.799	1.00	10.58
	ATOM	789	NE2	HIS	895	28.389	34.815	26.057	1.00	12.40
	ATOM	790	HE2	HIS	895	28.498	35.147	25.147	1.00	0.00
	ATOM	791	N	LEU	896	27.855	35.282	30.348	1.00	10.20
55	ATOM	792	H	LEU	896	28.341	35.868	29.735	1.00	0.00
	ATOM	793	CA	LEU	896	26.545	35.720	30.885	1.00	8.66
	ATOM	794	CB	LEU	896	26.057	37.028	30.153	1.00	7.86
	ATOM	795	CG	LEU	896	24.713	37.525	30.691	1.00	12.17
	ATOM	796	CD1	LEU	896	25.045	38.093	32.085	1.00	6.73
60	ATOM	797	CD2	LEU	896	23.945	38.431	29.677	1.00	10.66
	ATOM	798	C	LEU	896	25.453	34.661	30.720	1.00	9.55
	ATOM	799	O	LEU	896	24.585	34.436	31.572	1.00	8.49

	ATOM	800	N	ASN	897	25.453	34.032	29.540	1.00	10.93
	ATOM	801	H	ASN	897	26.134	34.289	28.903	1.00	0.00
	ATOM	802	CA	ASN	897	24.389	33.062	29.228	1.00	11.08
	ATOM	803	CB	ASN	897	24.015	33.235	27.705	1.00	8.76
5	ATOM	804	CG	ASN	897	23.536	34.643	27.556	1.00	10.41
	ATOM	805	OD1	ASN	897	24.086	35.417	26.813	1.00	7.25
	ATOM	806	ND2	ASN	897	22.558	35.120	28.291	1.00	13.03
	ATOM	807	HD21	ASN	897	22.111	34.562	28.963	1.00	0.00
	ATOM	808	HD22	ASN	897	22.268	36.039	28.165	1.00	0.00
10	ATOM	809	C	ASN	897	24.549	31.599	29.602	1.00	11.48
	ATOM	810	O	ASN	897	23.807	30.746	29.113	1.00	8.13
	ATOM	811	N	VAL	898	25.535	31.298	30.466	1.00	13.16
	ATOM	812	H	VAL	898	26.094	32.021	30.826	1.00	0.00
	ATOM	813	CA	VAL	898	25.653	29.913	30.992	1.00	12.94
15	ATOM	814	CB	VAL	898	26.974	29.194	30.488	1.00	11.16
	ATOM	815	CG1	VAL	898	26.956	28.966	28.948	1.00	5.53
	ATOM	816	CG2	VAL	898	28.152	29.993	31.051	1.00	10.80
	ATOM	817	C	VAL	898	25.662	30.007	32.548	1.00	14.86
	ATOM	818	O	VAL	898	26.012	31.052	33.113	1.00	14.62
20	ATOM	819	N	VAL	899	25.149	29.028	33.312	1.00	15.74
	ATOM	820	H	VAL	899	24.756	28.234	32.895	1.00	0.00
	ATOM	821	CA	VAL	899	25.291	29.152	34.790	1.00	15.93
	ATOM	822	CB	VAL	899	24.390	28.010	35.347	1.00	16.17
	ATOM	823	CG1	VAL	899	25.241	26.782	35.611	1.00	15.81
25	ATOM	824	CG2	VAL	899	23.592	28.517	36.516	1.00	19.65
	ATOM	825	C	VAL	899	26.845	29.067	35.089	1.00	15.49
	ATOM	826	O	VAL	899	27.587	28.238	34.551	1.00	16.01
	ATOM	827	N	ASN	900	27.415	30.001	35.844	1.00	12.82
	ATOM	828	H	ASN	900	26.826	30.654	36.232	1.00	0.00
30	ATOM	829	CA	ASN	900	28.862	30.035	36.141	1.00	13.41
	ATOM	830	CB	ASN	900	29.494	31.510	36.088	1.00	7.97
	ATOM	831	CG	ASN	900	29.265	32.076	34.703	1.00	7.89
	ATOM	832	OD1	ASN	900	29.586	31.476	33.691	1.00	10.97
	ATOM	833	ND2	ASN	900	28.672	33.229	34.520	1.00	8.33
35	ATOM	834	HD21	ASN	900	28.350	33.781	35.254	1.00	0.00
	ATOM	835	HD22	ASN	900	28.545	33.527	33.592	1.00	0.00
	ATOM	836	C	ASN	900	29.226	29.464	37.482	1.00	12.23
	ATOM	837	O	ASN	900	28.476	29.635	38.455	1.00	13.37
	ATOM	838	N	LEU	901	30.333	28.726	37.441	1.00	12.65
40	ATOM	839	H	LEU	901	30.784	28.652	36.567	1.00	0.00
	ATOM	840	CA	LEU	901	30.960	28.087	38.618	1.00	12.86
	ATOM	841	CB	LEU	901	32.141	27.127	38.200	1.00	11.90
	ATOM	842	CG	LEU	901	32.929	26.493	39.383	1.00	9.99
	ATOM	843	CD1	LEU	901	32.027	25.578	40.165	1.00	7.79
45	ATOM	844	CD2	LEU	901	34.102	25.715	38.870	1.00	7.33
	ATOM	845	C	LEU	901	31.533	29.202	39.508	1.00	13.48
	ATOM	846	O	LEU	901	32.288	30.052	39.014	1.00	13.90
	ATOM	847	N	LEU	902	31.094	29.257	40.776	1.00	13.00
	ATOM	848	H	LEU	902	30.349	28.665	40.977	1.00	0.00
50	ATOM	849	CA	LEU	902	31.537	30.241	41.845	1.00	14.02
	ATOM	850	CB	LEU	902	30.265	30.742	42.646	1.00	9.41
	ATOM	851	CG	LEU	902	29.216	31.414	41.758	1.00	7.80
	ATOM	852	CD1	LEU	902	28.094	31.795	42.652	1.00	5.80
	ATOM	853	CD2	LEU	902	29.754	32.656	41.053	1.00	8.43
55	ATOM	854	C	LEU	902	32.585	29.644	42.840	1.00	14.35
	ATOM	855	O	LEU	902	33.521	30.267	43.346	1.00	14.73
	ATOM	856	N	GLY	903	32.485	28.361	43.179	1.00	15.98
	ATOM	857	H	GLY	903	31.776	27.830	42.767	1.00	0.00
	ATOM	858	CA	GLY	903	33.429	27.736	44.138	1.00	12.37
60	ATOM	859	C	GLY	903	33.084	26.284	44.293	1.00	12.39
	ATOM	860	O	GLY	903	32.133	25.784	43.647	1.00	12.78
	ATOM	861	N	ALA	904	33.867	25.568	45.093	1.00	11.63

	ATOM	862	H	ALA	904	34.645	26.026	45.481	1.00	0.00
	ATOM	863	CA	ALA	904	33.591	24.118	45.360	1.00	13.37
	ATOM	864	CB	ALA	904	34.239	23.168	44.353	1.00	8.48
	ATOM	865	C	ALA	904	34.086	23.624	46.721	1.00	13.03
5	ATOM	866	O	ALA	904	35.059	24.158	47.264	1.00	13.67
	ATOM	867	N	CYS	905	33.379	22.647	47.329	1.00	12.13
	ATOM	868	H	CYS	905	32.564	22.326	46.881	1.00	0.00
	ATOM	869	CA	CYS	905	33.783	22.078	48.622	1.00	10.51
	ATOM	870	CB	CYS	905	32.677	22.109	49.612	1.00	10.95
10	ATOM	871	SG	CYS	905	31.922	23.744	49.804	1.00	12.03
	ATOM	872	C	CYS	905	34.103	20.657	48.321	1.00	10.18
	ATOM	873	O	CYS	905	33.273	19.837	47.999	1.00	9.79
	ATOM	874	N	THR	906	35.366	20.380	48.193	1.00	10.82
	ATOM	875	H	THR	906	35.970	21.144	48.149	1.00	0.00
15	ATOM	876	CA	THR	906	35.887	19.029	47.846	1.00	12.84
	ATOM	877	CB	THR	906	36.734	19.146	46.527	1.00	10.44
	ATOM	878	OG1	THR	906	38.007	19.666	46.918	1.00	10.05
	ATOM	879	HG1	THR	906	38.620	19.640	46.174	1.00	0.00
	ATOM	880	CG2	THR	906	36.134	20.085	45.478	1.00	6.51
20	ATOM	881	C	THR	906	36.757	18.374	48.958	1.00	14.70
	ATOM	882	O	THR	906	37.254	17.260	48.850	1.00	14.82
	ATOM	883	N	LYS	907	37.039	19.108	50.047	1.00	16.65
	ATOM	884	H	LYS	907	36.607	19.976	50.134	1.00	0.00
	ATOM	885	CA	LYS	907	37.813	18.549	51.165	1.00	17.00
25	ATOM	886	CB	LYS	907	38.052	19.698	52.229	1.00	16.13
	ATOM	887	C	LYS	907	37.143	17.308	51.853	1.00	16.52
	ATOM	888	O	LYS	907	35.915	17.084	51.967	1.00	13.15
	ATOM	889	N	PRO	908	37.984	16.402	52.348	1.00	18.08
	ATOM	890	CD	PRO	908	39.364	16.169	51.939	1.00	17.90
30	ATOM	891	CA	PRO	908	37.489	15.221	53.035	1.00	18.60
	ATOM	892	CB	PRO	908	38.705	14.378	53.482	1.00	17.41
	ATOM	893	CG	PRO	908	39.840	15.317	53.129	1.00	19.13
	ATOM	894	C	PRO	908	36.527	15.359	54.180	1.00	20.57
	ATOM	895	O	PRO	908	35.747	14.410	54.300	1.00	23.93
35	ATOM	896	N	GLY	909	36.370	16.338	55.073	1.00	19.86
	ATOM	897	H	GLY	909	36.862	17.176	55.066	1.00	0.00
	ATOM	898	CA	GLY	909	35.214	16.024	56.068	1.00	19.86
	ATOM	899	C	GLY	909	33.699	15.891	55.587	1.00	17.24
	ATOM	900	O	GLY	909	32.819	15.503	56.357	1.00	15.14
40	ATOM	901	N	GLY	910	33.338	16.134	54.303	1.00	14.35
	ATOM	902	H	GLY	910	34.038	16.191	53.621	1.00	0.00
	ATOM	903	CA	GLY	910	31.942	16.137	53.911	1.00	10.43
	ATOM	904	C	GLY	910	31.635	15.959	52.455	1.00	10.53
	ATOM	905	O	GLY	910	32.475	15.447	51.702	1.00	7.91
45	ATOM	906	N	PRO	911	30.402	16.285	52.035	1.00	10.45
	ATOM	907	CD	PRO	911	29.331	16.945	52.791	1.00	10.48
	ATOM	908	CA	PRO	911	30.006	15.994	50.633	1.00	12.76
	ATOM	909	CB	PRO	911	28.482	16.113	50.666	1.00	9.83
	ATOM	910	CG	PRO	911	28.270	17.148	51.723	1.00	12.02
50	ATOM	911	C	PRO	911	30.680	16.876	49.511	1.00	14.50
	ATOM	912	O	PRO	911	31.057	18.049	49.740	1.00	12.66
	ATOM	913	N	LEU	912	30.913	16.317	48.296	1.00	12.62
	ATOM	914	H	LEU	912	30.706	15.371	48.134	1.00	0.00
	ATOM	915	CA	LEU	912	31.483	17.159	47.229	1.00	11.37
55	ATOM	916	CB	LEU	912	31.958	16.233	46.051	1.00	10.41
	ATOM	917	CG	LEU	912	32.280	16.899	44.667	1.00	11.03
	ATOM	918	CD1	LEU	912	33.402	17.913	44.741	1.00	5.88
	ATOM	919	CD2	LEU	912	32.544	15.749	43.686	1.00	8.09
	ATOM	920	C	LEU	912	30.336	18.124	46.820	1.00	12.24
60	ATOM	921	O	LEU	912	29.216	17.710	46.533	1.00	13.32
	ATOM	922	N	MET	913	30.562	19.440	46.839	1.00	11.24
	ATOM	923	H	MET	913	31.449	19.743	47.131	1.00	0.00

	ATOM	924	CA	MET	913	29.520	20.432	46.485	1.00	10.20
	ATOM	925	CB	MET	913	29.240	21.277	47.707	1.00	11.60
	ATOM	926	CG	MET	913	28.683	20.393	48.823	1.00	14.55
	ATOM	927	SD	MET	913	28.631	21.364	50.315	1.00	21.35
5	ATOM	928	CE	MET	913	27.082	20.768	50.897	1.00	24.13
	ATOM	929	C	MET	913	30.064	21.315	45.348	1.00	12.17
	ATOM	930	O	MET	913	31.228	21.769	45.443	1.00	11.45
	ATOM	931	N	VAL	914	29.228	21.555	44.296	1.00	9.66
	ATOM	932	H	VAL	914	28.344	21.136	44.307	1.00	0.00
10	ATOM	933	CA	VAL	914	29.633	22.345	43.106	1.00	9.42
	ATOM	934	CB	VAL	914	29.564	21.442	41.859	1.00	11.05
	ATOM	935	CG1	VAL	914	30.171	22.256	40.678	1.00	8.79
	ATOM	936	CG2	VAL	914	30.374	20.105	42.076	1.00	5.33
	ATOM	937	C	VAL	914	28.673	23.479	43.084	1.00	10.61
15	ATOM	938	O	VAL	914	27.479	23.261	42.974	1.00	11.08
	ATOM	939	N	ILE	915	29.244	24.656	43.417	1.00	11.87
	ATOM	940	H	ILE	915	30.222	24.664	43.492	1.00	0.00
	ATOM	941	CA	ILE	915	28.553	25.937	43.602	1.00	9.89
	ATOM	942	CB	ILE	915	29.186	26.685	44.826	1.00	8.40
20	ATOM	943	CG2	ILE	915	28.258	27.859	45.158	1.00	7.17
	ATOM	944	CG1	ILE	915	29.347	25.792	46.069	1.00	7.35
	ATOM	945	CD1	ILE	915	30.446	26.351	47.002	1.00	8.40
	ATOM	946	C	ILE	915	28.556	26.844	42.413	1.00	11.10
	ATOM	947	O	ILE	915	29.607	27.293	41.969	1.00	11.91
25	ATOM	948	N	VAL	916	27.353	27.137	41.913	1.00	11.04
	ATOM	949	H	VAL	916	26.566	26.747	42.359	1.00	0.00
	ATOM	950	CA	VAL	916	27.125	28.027	40.771	1.00	9.88
	ATOM	951	CB	VAL	916	26.552	27.262	39.570	1.00	5.91
	ATOM	952	CG1	VAL	916	27.525	26.163	39.162	1.00	5.76
30	ATOM	953	CG2	VAL	916	25.105	26.727	39.938	1.00	4.31
	ATOM	954	C	VAL	916	26.116	29.139	41.139	1.00	13.36
	ATOM	955	O	VAL	916	25.513	29.196	42.235	1.00	14.83
	ATOM	956	N	GLU	917	25.917	30.068	40.186	1.00	14.30
	ATOM	957	H	GLU	917	26.480	30.002	39.382	1.00	0.00
35	ATOM	958	CA	GLU	917	24.952	31.203	40.316	1.00	12.81
	ATOM	959	CB	GLU	917	24.806	32.066	39.043	1.00	13.58
	ATOM	960	CG	GLU	917	26.223	32.665	38.785	1.00	14.81
	ATOM	961	CD	GLU	917	26.356	33.150	37.333	1.00	17.64
	ATOM	962	OE1	GLU	917	26.897	34.234	37.115	1.00	16.91
40	ATOM	963	OE2	GLU	917	25.942	32.420	36.435	1.00	16.91
	ATOM	964	C	GLU	917	23.548	30.804	40.571	1.00	11.24
	ATOM	965	O	GLU	917	23.091	29.853	39.942	1.00	11.29
	ATOM	966	N	PHE	918	22.865	31.498	41.487	1.00	10.97
	ATOM	967	H	PHE	918	23.355	32.140	42.035	1.00	0.00
45	ATOM	968	CA	PHE	918	21.439	31.279	41.728	1.00	9.11
	ATOM	969	CB	PHE	918	21.092	31.690	43.140	1.00	9.90
	ATOM	970	CG	PHE	918	19.659	31.603	43.355	1.00	7.87
	ATOM	971	CD1	PHE	918	19.035	30.360	43.389	1.00	9.84
	ATOM	972	CD2	PHE	918	18.938	32.780	43.563	1.00	7.10
50	ATOM	973	CE1	PHE	918	17.663	30.285	43.649	1.00	10.17
	ATOM	974	CE2	PHE	918	17.567	32.697	43.824	1.00	9.85
	ATOM	975	CZ	PHE	918	16.941	31.450	43.867	1.00	11.22
	ATOM	976	C	PHE	918	20.639	32.176	40.720	1.00	11.97
	ATOM	977	O	PHE	918	20.976	33.369	40.532	1.00	13.58
55	ATOM	978	N	CYS	919	19.668	31.567	39.992	1.00	12.60
	ATOM	979	H	CYS	919	19.611	30.610	40.167	1.00	0.00
	ATOM	980	CA	CYS	919	18.706	32.130	38.990	1.00	9.86
	ATOM	981	CB	CYS	919	18.721	31.278	37.733	1.00	9.10
	ATOM	982	SG	CYS	919	20.412	31.388	37.041	1.00	12.96
60	ATOM	983	C	CYS	919	17.281	32.188	39.559	1.00	10.14
	ATOM	984	O	CYS	919	16.535	31.218	39.604	1.00	9.92
	ATOM	985	N	LYS	920	16.982	33.351	40.093	1.00	10.17



	ATOM	986	H	LYS	920	17.708	34.007	40.053	1.00	0.00
	ATOM	987	CA	LYS	920	15.734	33.734	40.756	1.00	14.30
	ATOM	988	CB	LYS	920	15.747	35.277	40.677	1.00	20.03
	ATOM	989	CG	LYS	920	14.643	36.205	41.139	1.00	25.67
5	ATOM	990	CD	LYS	920	15.369	37.070	42.150	1.00	37.75
	ATOM	991	CE	LYS	920	15.811	38.498	41.665	1.00	43.27
	ATOM	992	NZ	LYS	920	16.947	39.053	42.470	1.00	50.03
	ATOM	993	HZ1	LYS	920	17.581	38.281	42.769	1.00	0.00
	ATOM	994	HZ2	LYS	920	16.638	39.569	43.323	1.00	0.00
10	ATOM	995	HZ3	LYS	920	17.477	39.706	41.859	1.00	0.00
	ATOM	996	C	LYS	920	14.414	33.137	40.287	1.00	12.85
	ATOM	997	O	LYS	920	13.617	32.757	41.113	1.00	12.85
	ATOM	998	N	PHE	921	14.121	33.063	38.989	1.00	13.43
	ATOM	999	H	PHE	921	14.803	33.376	38.364	1.00	0.00
15	ATOM	1000	CA	PHE	921	12.862	32.550	38.416	1.00	12.30
	ATOM	1001	CB	PHE	921	12.613	33.385	37.181	1.00	14.41
	ATOM	1002	CG	PHE	921	12.312	34.771	37.563	1.00	17.64
	ATOM	1003	CD1	PHE	921	11.024	35.111	38.043	1.00	21.95
	ATOM	1004	CD2	PHE	921	13.299	35.753	37.472	1.00	16.78
20	ATOM	1005	CE1	PHE	921	10.739	36.435	38.434	1.00	23.57
	ATOM	1006	CE2	PHE	921	13.041	37.079	37.853	1.00	19.36
	ATOM	1007	CZ	PHE	921	11.774	37.407	38.331	1.00	23.09
	ATOM	1008	C	PHE	921	12.810	31.086	38.082	1.00	13.65
	ATOM	1009	O	PHE	921	11.831	30.538	37.587	1.00	15.74
25	ATOM	1010	N	GLY	922	13.925	30.401	38.271	1.00	14.61
	ATOM	1011	H	GLY	922	14.695	30.867	38.648	1.00	0.00
	ATOM	1012	CA	GLY	922	13.955	28.969	37.982	1.00	15.59
	ATOM	1013	C	GLY	922	13.952	28.665	36.502	1.00	15.93
	ATOM	1014	O	GLY	922	14.221	29.510	35.636	1.00	15.04
30	ATOM	1015	N	ASN	923	13.638	27.419	36.198	1.00	16.36
	ATOM	1016	H	ASN	923	13.551	26.762	36.919	1.00	0.00
	ATOM	1017	CA	ASN	923	13.664	27.012	34.776	1.00	13.91
	ATOM	1018	CB	ASN	923	13.604	25.464	34.745	1.00	14.04
	ATOM	1019	CG	ASN	923	12.231	24.879	34.662	1.00	12.96
35	ATOM	1020	OD1	ASN	923	11.672	24.736	33.590	1.00	15.83
	ATOM	1021	ND2	ASN	923	11.619	24.535	35.760	1.00	15.75
	ATOM	1022	HD21	ASN	923	12.053	24.668	36.626	1.00	0.00
	ATOM	1023	HD22	ASN	923	10.727	24.154	35.665	1.00	0.00
	ATOM	1024	C	ASN	923	12.617	27.683	33.913	1.00	14.20
40	ATOM	1025	O	ASN	923	11.477	28.020	34.308	1.00	12.54
	ATOM	1026	N	LEU	924	13.037	27.832	32.668	1.00	14.23
	ATOM	1027	H	LEU	924	13.920	27.470	32.452	1.00	0.00
	ATOM	1028	CA	LEU	924	12.260	28.534	31.671	1.00	12.20
	ATOM	1029	CB	LEU	924	13.236	28.848	30.470	1.00	12.58
45	ATOM	1030	CG	LEU	924	12.715	29.881	29.381	1.00	11.49
	ATOM	1031	CD1	LEU	924	12.460	31.286	30.030	1.00	10.40
	ATOM	1032	CD2	LEU	924	13.756	29.974	28.232	1.00	10.52
	ATOM	1033	C	LEU	924	10.995	27.862	31.234	1.00	12.75
	ATOM	1034	O	LEU	924	10.004	28.547	30.944	1.00	13.78
50	ATOM	1035	N	SER	925	10.963	26.544	31.184	1.00	10.81
	ATOM	1036	H	SER	925	11.744	26.055	31.515	1.00	0.00
	ATOM	1037	CA	SER	925	9.723	25.850	30.762	1.00	10.73
	ATOM	1038	CB	SER	925	10.053	24.359	30.701	1.00	12.60
	ATOM	1039	OG	SER	925	8.954	23.722	30.100	1.00	16.67
55	ATOM	1040	HG	SER	925	8.739	22.944	30.635	1.00	0.00
	ATOM	1041	C	SER	925	8.569	26.124	31.747	1.00	11.36
	ATOM	1042	O	SER	925	7.441	26.587	31.487	1.00	10.42
	ATOM	1043	N	THR	926	8.860	25.873	33.011	1.00	11.52
	ATOM	1044	H	THR	926	9.683	25.389	33.252	1.00	0.00
60	ATOM	1045	CA	THR	926	7.849	26.121	34.037	1.00	12.03
	ATOM	1046	CB	THR	926	8.401	25.680	35.403	1.00	10.56
	ATOM	1047	OG1	THR	926	8.769	24.317	35.320	1.00	10.79

	ATOM	1048	HG1	THR	926	8.622	23.869	36.165	1.00	0.00
	ATOM	1049	CG2	THR	926	7.350	25.808	36.530	1.00	12.96
	ATOM	1050	C	THR	926	7.547	27.609	34.043	1.00	13.28
	ATOM	1051	O	THR	926	6.418	28.065	34.023	1.00	13.54
5	ATOM	1052	N	TYR	927	8.560	28.443	34.035	1.00	13.11
	ATOM	1053	H	TYR	927	9.478	28.105	34.019	1.00	0.00
	ATOM	1054	CA	TYR	927	8.289	29.899	34.068	1.00	15.88
	ATOM	1055	CB	TYR	927	9.657	30.705	34.056	1.00	14.53
	ATOM	1056	CG	TYR	927	9.361	32.131	34.032	1.00	15.48
10	ATOM	1057	CD1	TYR	927	9.096	32.779	35.234	1.00	14.98
	ATOM	1058	CE1	TYR	927	8.786	34.136	35.210	1.00	14.78
	ATOM	1059	CD2	TYR	927	9.326	32.802	32.809	1.00	17.53
	ATOM	1060	CE2	TYR	927	9.012	34.158	32.792	1.00	18.36
	ATOM	1061	CZ	TYR	927	8.744	34.825	34.000	1.00	16.61
15	ATOM	1062	OH	TYR	927	8.475	36.164	33.984	1.00	11.07
	ATOM	1063	HH	TYR	927	8.610	36.518	34.870	1.00	0.00
	ATOM	1064	C	TYR	927	7.393	30.338	32.874	1.00	15.11
	ATOM	1065	O	TYR	927	6.386	30.995	33.059	1.00	17.40
	ATOM	1066	N	LEU	928	7.641	29.992	31.627	1.00	13.75
20	ATOM	1067	H	LEU	928	8.396	29.397	31.446	1.00	0.00
	ATOM	1068	CA	LEU	928	6.754	30.478	30.514	1.00	13.93
	ATOM	1069	CB	LEU	928	7.362	30.072	29.120	1.00	8.79
	ATOM	1070	CG	LEU	928	8.724	30.770	28.844	1.00	6.05
	ATOM	1071	CD1	LEU	928	9.221	30.247	27.546	1.00	5.49
25	ATOM	1072	CD2	LEU	928	8.628	32.324	28.868	1.00	6.04
	ATOM	1073	C	LEU	928	5.336	29.986	30.617	1.00	14.00
	ATOM	1074	O	LEU	928	4.354	30.669	30.310	1.00	14.24
	ATOM	1075	N	ARG	929	5.212	28.741	31.028	1.00	16.59
	ATOM	1076	H	ARG	929	6.018	28.197	31.170	1.00	0.00
30	ATOM	1077	CA	ARG	929	3.872	28.123	31.174	1.00	19.97
	ATOM	1078	CB	ARG	929	4.144	26.703	31.551	1.00	20.29
	ATOM	1079	CG	ARG	929	3.067	25.809	31.049	1.00	27.60
	ATOM	1080	CD	ARG	929	3.775	24.453	31.129	1.00	39.93
	ATOM	1081	NE	ARG	929	4.421	24.115	32.452	1.00	46.28
35	ATOM	1082	HE	ARG	929	3.921	24.240	33.285	1.00	0.00
	ATOM	1083	CZ	ARG	929	5.706	23.674	32.523	1.00	49.13
	ATOM	1084	NH1	ARG	929	6.205	23.368	33.723	1.00	50.85
	ATOM	1085	HH11	ARG	929	5.644	23.469	34.543	1.00	0.00
	ATOM	1086	HH12	ARG	929	7.146	23.037	33.794	1.00	0.00
40	ATOM	1087	NH2	ARG	929	6.512	23.573	31.444	1.00	47.09
	ATOM	1088	HH21	ARG	929	6.183	23.831	30.534	1.00	0.00
	ATOM	1089	HH22	ARG	929	7.447	23.232	31.547	1.00	0.00
	ATOM	1090	C	ARG	929	3.001	28.881	32.221	1.00	21.36
	ATOM	1091	O	ARG	929	1.764	28.868	32.163	1.00	22.82
45	ATOM	1092	N	SER	930	3.673	29.574	33.190	1.00	20.93
	ATOM	1093	H	SER	930	4.655	29.536	33.175	1.00	0.00
	ATOM	1094	CA	SER	930	3.034	30.391	34.249	1.00	18.74
	ATOM	1095	CB	SER	930	3.930	30.589	35.501	1.00	16.40
	ATOM	1096	OG	SER	930	4.980	31.514	35.253	1.00	18.58
50	ATOM	1097	HG	SER	930	5.213	31.981	36.073	1.00	0.00
	ATOM	1098	C	SER	930	2.693	31.793	33.759	1.00	18.70
	ATOM	1099	O	SER	930	1.941	32.497	34.430	1.00	18.40
	ATOM	1100	N	LYS	931	3.191	32.225	32.570	1.00	16.18
	ATOM	1101	H	LYS	931	3.854	31.653	32.125	1.00	0.00
55	ATOM	1102	CA	LYS	931	2.906	33.593	32.051	1.00	14.32
	ATOM	1103	CB	LYS	931	4.225	34.240	31.640	1.00	14.86
	ATOM	1104	CG	LYS	931	5.309	34.226	32.704	1.00	16.57
	ATOM	1105	CD	LYS	931	4.765	34.979	33.910	1.00	19.74
	ATOM	1106	CE	LYS	931	5.172	36.436	34.091	1.00	21.43
60	ATOM	1107	NZ	LYS	931	4.723	37.301	33.043	1.00	22.89
	ATOM	1108	HZ1	LYS	931	3.693	37.203	32.941	1.00	0.00
	ATOM	1109	HZ2	LYS	931	5.196	37.049	32.152	1.00	0.00

	ATOM	1110	HZ3	LYS	931	4.957	38.284	33.294	1.00	0.00
	ATOM	1111	C	LYS	931	1.914	33.692	30.877	1.00	15.54
	ATOM	1112	O	LYS	931	1.762	34.712	30.182	1.00	14.51
	ATOM	1113	N	ARG	932	1.163	32.609	30.618	1.00	15.99
5	ATOM	1114	H	ARG	932	1.345	31.811	31.150	1.00	0.00
	ATOM	1115	CA	ARG	932	0.144	32.619	29.511	1.00	18.11
	ATOM	1116	CB	ARG	932	-0.536	31.208	29.452	1.00	16.54
	ATOM	1117	CG	ARG	932	0.445	30.058	29.165	1.00	16.70
	ATOM	1118	CD	ARG	932	0.320	29.694	27.720	1.00	10.94
10	ATOM	1119	NE	ARG	932	1.258	28.610	27.603	1.00	11.52
	ATOM	1120	HE	ARG	932	2.211	28.768	27.768	1.00	0.00
	ATOM	1121	CZ	ARG	932	0.820	27.381	27.298	1.00	14.55
	ATOM	1122	NH1	ARG	932	1.702	26.382	27.173	1.00	11.67
	ATOM	1123	HH11	ARG	932	2.674	26.560	27.315	1.00	0.00
15	ATOM	1124	HH12	ARG	932	1.382	25.464	26.939	1.00	0.00
	ATOM	1125	NH2	ARG	932	-0.474	27.114	27.096	1.00	15.30
	ATOM	1126	HH21	ARG	932	-1.142	27.851	27.166	1.00	0.00
	ATOM	1127	HH22	ARG	932	-0.764	26.190	26.859	1.00	0.00
	ATOM	1128	C	ARG	932	-0.949	33.757	29.641	1.00	19.02
20	ATOM	1129	O	ARG	932	-1.422	34.337	28.642	1.00	18.93
	ATOM	1130	N	ASN	933	-1.400	34.017	30.893	1.00	18.12
	ATOM	1131	H	ASN	933	-1.013	33.499	31.635	1.00	0.00
	ATOM	1132	CA	ASN	933	-2.376	35.083	31.189	1.00	19.81
	ATOM	1133	CB	ASN	933	-3.194	34.689	32.468	1.00	18.43
25	ATOM	1134	CG	ASN	933	-4.521	35.504	32.551	1.00	22.85
	ATOM	1135	OD1	ASN	933	-5.270	35.756	31.602	1.00	20.40
	ATOM	1136	ND2	ASN	933	-4.985	35.905	33.714	1.00	22.75
	ATOM	1137	HD21	ASN	933	-4.563	35.735	34.576	1.00	0.00
	ATOM	1138	HD22	ASN	933	-5.822	36.399	33.665	1.00	0.00
30	ATOM	1139	C	ASN	933	-1.651	36.440	31.399	1.00	20.96
	ATOM	1140	O	ASN	933	-2.251	37.455	31.775	1.00	22.58
	ATOM	1141	N	GLU	934	-0.321	36.466	31.158	1.00	20.41
	ATOM	1142	H	GLU	934	0.066	35.642	30.805	1.00	0.00
	ATOM	1143	CA	GLU	934	0.568	37.645	31.315	1.00	18.00
35	ATOM	1144	CB	GLU	934	1.339	37.439	32.563	1.00	17.64
	ATOM	1145	CG	GLU	934	0.485	37.702	33.743	1.00	20.87
	ATOM	1146	CD	GLU	934	1.188	37.238	35.001	1.00	24.94
	ATOM	1147	OE1	GLU	934	0.515	36.593	35.785	1.00	32.23
	ATOM	1148	OE2	GLU	934	2.353	37.509	35.255	1.00	26.83
40	ATOM	1149	C	GLU	934	1.515	37.781	30.117	1.00	18.81
	ATOM	1150	O	GLU	934	2.734	37.963	30.221	1.00	20.05
	ATOM	1151	N	PHE	935	0.906	37.685	28.932	1.00	17.41
	ATOM	1152	H	PHE	935	-0.075	37.609	28.914	1.00	0.00
	ATOM	1153	CA	PHE	935	1.607	37.785	27.676	1.00	17.54
45	ATOM	1154	CB	PHE	935	1.849	36.386	27.027	1.00	13.53
	ATOM	1155	CG	PHE	935	2.544	36.499	25.685	1.00	13.81
	ATOM	1156	CD1	PHE	935	1.779	36.477	24.490	1.00	11.61
	ATOM	1157	CD2	PHE	935	3.952	36.569	25.607	1.00	9.55
	ATOM	1158	CE1	PHE	935	2.416	36.523	23.244	1.00	12.67
50	ATOM	1159	CE2	PHE	935	4.593	36.613	24.375	1.00	10.60
	ATOM	1160	CZ	PHE	935	3.827	36.583	23.195	1.00	12.43
	ATOM	1161	C	PHE	935	0.860	38.624	26.676	1.00	18.25
	ATOM	1162	O	PHE	935	-0.356	38.616	26.646	1.00	20.37
	ATOM	1163	N	VAL	936	1.606	39.376	25.882	1.00	18.80
55	ATOM	1164	H	VAL	936	2.558	39.466	26.104	1.00	0.00
	ATOM	1165	CA	VAL	936	1.049	40.197	24.818	1.00	20.33
	ATOM	1166	CB	VAL	936	0.758	41.689	25.111	1.00	25.79
	ATOM	1167	CG1	VAL	936	-0.740	41.613	24.970	1.00	26.82
	ATOM	1168	CG2	VAL	936	1.454	42.376	26.329	1.00	24.06
60	ATOM	1169	C	VAL	936	2.107	40.311	23.767	1.00	19.26
	ATOM	1170	O	VAL	936	3.283	40.427	24.096	1.00	17.94
	ATOM	1171	N	PRO	937	1.753	40.279	22.497	1.00	20.85

	ATOM	1172	CD	PRO	937	0.407	40.108	21.901	1.00	21.81
	ATOM	1173	CA	PRO	937	2.815	40.170	21.494	1.00	22.91
	ATOM	1174	CB	PRO	937	2.110	39.918	20.166	1.00	21.52
	ATOM	1175	CG	PRO	937	0.814	39.279	20.657	1.00	21.81
5	ATOM	1176	C	PRO	937	3.706	41.378	21.453	1.00	26.52
	ATOM	1177	O	PRO	937	4.931	41.301	21.445	1.00	28.22
	ATOM	1178	N	TYR	938	3.099	42.519	21.545	1.00	29.94
	ATOM	1179	H	TYR	938	2.171	42.552	21.853	1.00	0.00
	ATOM	1180	CA	TYR	938	3.782	43.820	21.477	1.00	31.85
10	ATOM	1181	CB	TYR	938	3.517	44.301	20.016	1.00	32.90
	ATOM	1182	C	TYR	938	3.056	44.471	22.635	1.00	34.35
	ATOM	1183	O	TYR	938	1.810	44.373	22.715	1.00	36.12
	ATOM	1185	CB	ASP	998	6.074	42.226	35.380	1.00	30.69
	ATOM	1186	C	ASP	998	4.803	41.587	33.226	1.00	30.65
15	ATOM	1187	O	ASP	998	5.098	40.405	33.411	1.00	29.91
	ATOM	1188	HT1	ASP	998	3.305	42.075	35.385	1.00	0.00
	ATOM	1189	HT2	ASP	998	2.988	43.410	34.395	1.00	0.00
	ATOM	1190	N	ASP	998	3.693	42.975	35.025	1.00	32.81
	ATOM	1191	HT3	ASP	998	3.859	43.609	35.838	1.00	0.00
20	ATOM	1192	CA	ASP	998	4.988	42.684	34.319	1.00	31.83
	ATOM	1193	N	PHE	999	4.142	41.980	32.126	1.00	27.73
	ATOM	1194	H	PHE	999	4.011	42.927	31.923	1.00	0.00
	ATOM	1195	CA	PHE	999	3.884	41.046	31.028	1.00	25.58
	ATOM	1196	CB	PHE	999	2.873	41.657	30.038	1.00	26.61
25	ATOM	1197	CG	PHE	999	1.462	41.418	30.429	1.00	29.93
	ATOM	1198	CD1	PHE	999	0.539	41.066	29.406	1.00	30.62
	ATOM	1199	CD2	PHE	999	1.024	41.567	31.773	1.00	29.73
	ATOM	1200	CE1	PHE	999	-0.826	40.848	29.669	1.00	29.83
	ATOM	1201	CE2	PHE	999	-0.328	41.359	32.057	1.00	30.39
30	ATOM	1202	CZ	PHE	999	-1.226	41.003	31.009	1.00	32.11
	ATOM	1203	C	PHE	999	5.079	40.612	30.208	1.00	24.67
	ATOM	1204	O	PHE	999	6.094	41.304	30.071	1.00	25.41
	ATOM	1205	N	LEU	1000	5.008	39.412	29.703	1.00	22.25
	ATOM	1206	H	LEU	1000	4.316	38.800	30.001	1.00	0.00
35	ATOM	1207	CA	LEU	1000	6.051	38.971	28.787	1.00	17.43
	ATOM	1208	CB	LEU	1000	6.128	37.452	28.658	1.00	16.97
	ATOM	1209	CG	LEU	1000	6.921	36.612	29.585	1.00	14.78
	ATOM	1210	CD1	LEU	1000	6.636	35.222	29.126	1.00	15.53
	ATOM	1211	CD2	LEU	1000	8.430	36.891	29.555	1.00	17.96
40	ATOM	1212	C	LEU	1000	5.540	39.493	27.443	1.00	16.93
	ATOM	1213	O	LEU	1000	4.333	39.721	27.248	1.00	16.01
	ATOM	1214	N	THR	1001	6.415	39.639	26.462	1.00	15.39
	ATOM	1215	H	THR	1001	7.344	39.391	26.616	1.00	0.00
	ATOM	1216	CA	THR	1001	5.998	40.112	25.118	1.00	16.05
45	ATOM	1217	CB	THR	1001	6.240	41.641	24.874	1.00	17.01
	ATOM	1218	OG1	THR	1001	7.651	41.825	24.971	1.00	19.97
	ATOM	1219	HG1	THR	1001	7.799	42.738	25.249	1.00	0.00
	ATOM	1220	CG2	THR	1001	5.574	42.583	25.870	1.00	14.66
	ATOM	1221	C	THR	1001	6.855	39.394	24.114	1.00	16.20
50	ATOM	1222	O	THR	1001	7.869	38.787	24.493	1.00	15.90
	ATOM	1223	N	LEU	1002	6.561	39.474	22.811	1.00	16.72
	ATOM	1224	H	LEU	1002	5.771	39.992	22.543	1.00	0.00
	ATOM	1225	CA	LEU	1002	7.391	38.782	21.788	1.00	17.23
	ATOM	1226	CB	LEU	1002	6.794	39.151	20.436	1.00	16.16
55	ATOM	1227	CG	LEU	1002	7.301	38.393	19.214	1.00	16.93
	ATOM	1228	CD1	LEU	1002	7.262	36.847	19.332	1.00	11.65
	ATOM	1229	CD2	LEU	1002	6.403	38.921	18.071	1.00	15.62
	ATOM	1230	C	LEU	1002	8.881	39.145	21.893	1.00	18.76
	ATOM	1231	O	LEU	1002	9.804	38.343	21.674	1.00	18.82
60	ATOM	1232	N	GLU	1003	9.135	40.399	22.279	1.00	18.56
	ATOM	1233	H	GLU	1003	8.393	41.037	22.309	1.00	0.00
	ATOM	1234	CA	GLU	1003	10.499	40.870	22.462	1.00	17.00

	ATOM	1235	CB	GLU	1003	10.489	42.234	22.987	1.00	20.27
	ATOM	1236	CG	GLU	1003	11.584	42.852	22.175	1.00	24.86
	ATOM	1237	CD	GLU	1003	12.120	44.035	22.902	1.00	29.23
	ATOM	1238	OE1	GLU	1003	11.378	44.749	23.591	1.00	30.66
5	ATOM	1239	OE2	GLU	1003	13.316	44.229	22.756	1.00	32.63
	ATOM	1240	C	GLU	1003	11.253	40.045	23.460	1.00	15.42
	ATOM	1241	O	GLU	1003	12.394	39.671	23.261	1.00	16.49
	ATOM	1242	N	HIS	1004	10.687	39.836	24.628	1.00	15.02
	ATOM	1243	H	HIS	1004	9.787	40.201	24.756	1.00	0.00
10	ATOM	1244	CA	HIS	1004	11.300	39.003	25.674	1.00	14.20
	ATOM	1245	C	HIS	1004	11.670	37.624	25.117	1.00	13.88
	ATOM	1246	O	HIS	1004	12.738	37.102	25.404	1.00	14.33
	ATOM	1247	CB	HIS	1004	10.345	38.666	26.809	1.00	12.47
	ATOM	1248	CG	HIS	1004	10.031	39.874	27.518	1.00	12.45
15	ATOM	1249	ND1	HIS	1004	10.558	40.211	28.720	1.00	16.18
	ATOM	1250	HD1	HIS	1004	11.116	39.638	29.290	1.00	0.00
	ATOM	1251	CD2	HIS	1004	9.171	40.844	27.109	1.00	8.88
	ATOM	1252	NE2	HIS	1004	9.195	41.747	28.088	1.00	15.41
	ATOM	1253	CE1	HIS	1004	10.036	41.390	29.102	1.00	11.02
20	ATOM	1254	N	LEU	1005	10.735	36.999	24.385	1.00	12.64
	ATOM	1255	H	LEU	1005	9.896	37.487	24.250	1.00	0.00
	ATOM	1256	CA	LEU	1005	10.864	35.634	23.780	1.00	11.43
	ATOM	1257	CB	LEU	1005	9.487	35.271	23.159	1.00	10.84
	ATOM	1258	CG	LEU	1005	8.408	34.561	24.011	1.00	10.35
25	ATOM	1259	CD1	LEU	1005	8.370	35.014	25.425	1.00	10.63
	ATOM	1260	CD2	LEU	1005	7.151	34.657	23.221	1.00	7.70
	ATOM	1261	C	LEU	1005	11.996	35.494	22.765	1.00	10.78
	ATOM	1262	O	LEU	1005	12.726	34.486	22.779	1.00	9.24
	ATOM	1263	N	ILE	1006	12.143	36.483	21.866	1.00	10.52
30	ATOM	1264	H	ILE	1006	11.440	37.173	21.857	1.00	0.00
	ATOM	1265	CA	ILE	1006	13.252	36.522	20.868	1.00	10.50
	ATOM	1266	CB	ILE	1006	13.080	37.642	19.801	1.00	10.87
	ATOM	1267	CG2	ILE	1006	14.234	37.597	18.738	1.00	8.71
	ATOM	1268	CG1	ILE	1006	11.685	37.441	19.160	1.00	13.09
35	ATOM	1269	CD1	ILE	1006	11.248	38.414	18.009	1.00	15.22
	ATOM	1270	C	ILE	1006	14.557	36.799	21.589	1.00	10.59
	ATOM	1271	O	ILE	1006	15.629	36.334	21.241	1.00	14.26
	ATOM	1272	N	CYS	1007	14.519	37.695	22.545	1.00	10.11
	ATOM	1273	H	CYS	1007	13.688	38.207	22.648	1.00	0.00
40	ATOM	1274	CA	CYS	1007	15.662	38.020	23.371	1.00	9.38
	ATOM	1275	CB	CYS	1007	15.265	39.142	24.380	1.00	10.19
	ATOM	1276	SG	CYS	1007	16.707	39.479	25.392	1.00	17.87
	ATOM	1277	C	CYS	1007	16.120	36.753	24.125	1.00	9.24
	ATOM	1278	O	CYS	1007	17.295	36.433	24.138	1.00	9.63
45	ATOM	1279	N	TYR	1008	15.270	35.953	24.793	1.00	10.22
	ATOM	1280	H	TYR	1008	14.336	36.233	24.872	1.00	0.00
	ATOM	1281	CA	TYR	1008	15.728	34.722	25.491	1.00	7.90
	ATOM	1282	CB	TYR	1008	14.512	34.055	26.129	1.00	8.86
	ATOM	1283	CG	TYR	1008	13.848	34.829	27.183	1.00	9.99
50	ATOM	1284	CD1	TYR	1008	12.472	34.531	27.391	1.00	13.26
	ATOM	1285	CE1	TYR	1008	11.766	35.186	28.432	1.00	11.32
	ATOM	1286	CD2	TYR	1008	14.519	35.780	27.988	1.00	13.91
	ATOM	1287	CE2	TYR	1008	13.818	36.443	29.029	1.00	11.83
	ATOM	1288	CZ	TYR	1008	12.459	36.115	29.217	1.00	13.11
55	ATOM	1289	OH	TYR	1008	11.789	36.611	30.280	1.00	13.52
	ATOM	1290	HH	TYR	1008	12.340	37.242	30.757	1.00	0.00
	ATOM	1291	C	TYR	1008	16.380	33.747	24.507	1.00	7.08
	ATOM	1292	O	TYR	1008	17.402	33.094	24.767	1.00	7.75
	ATOM	1293	N	SER	1009	15.768	33.582	23.331	1.00	7.50
60	ATOM	1294	H	SER	1009	14.858	33.938	23.245	1.00	0.00
	ATOM	1295	CA	SER	1009	16.273	32.692	22.225	1.00	7.86
	ATOM	1296	CB	SER	1009	15.342	32.802	20.981	1.00	6.63

	ATOM	1297	OG	SER	1009	14.004	32.474	21.292	1.00	10.44
	ATOM	1298	HG	SER	1009	13.409	32.744	20.591	1.00	0.00
	ATOM	1299	C	SER	1009	17.678	33.074	21.799	1.00	6.60
	ATOM	1300	O	SER	1009	18.581	32.249	21.622	1.00	9.02
5	ATOM	1301	N	PHE	1010	17.850	34.357	21.485	1.00	7.20
	ATOM	1302	H	PHE	1010	17.051	34.929	21.495	1.00	0.00
	ATOM	1303	CA	PHE	1010	19.150	34.974	21.097	1.00	7.36
	ATOM	1304	CB	PHE	1010	18.939	36.549	20.950	1.00	7.82
	ATOM	1305	CG	PHE	1010	20.232	37.286	20.834	1.00	11.24
10	ATOM	1306	CD1	PHE	1010	20.624	38.185	21.844	1.00	13.22
	ATOM	1307	CD2	PHE	1010	21.107	37.091	19.741	1.00	9.87
	ATOM	1308	CE1	PHE	1010	21.863	38.866	21.766	1.00	13.93
	ATOM	1309	CE2	PHE	1010	22.343	37.755	19.638	1.00	10.68
	ATOM	1310	CZ	PHE	1010	22.713	38.636	20.659	1.00	13.80
15	ATOM	1311	C	PHE	1010	20.206	34.661	22.201	1.00	8.98
	ATOM	1312	O	PHE	1010	21.372	34.281	21.919	1.00	9.84
	ATOM	1313	N	GLN	1011	19.833	34.902	23.499	1.00	9.42
	ATOM	1314	H	GLN	1011	18.966	35.336	23.658	1.00	0.00
	ATOM	1315	CA	GLN	1011	20.711	34.636	24.649	1.00	6.78
20	ATOM	1316	CB	GLN	1011	20.100	35.033	25.932	1.00	7.27
	ATOM	1317	CG	GLN	1011	20.015	36.508	26.108	1.00	9.45
	ATOM	1318	CD	GLN	1011	19.405	36.763	27.496	1.00	12.64
	ATOM	1319	OE1	GLN	1011	20.079	36.615	28.511	1.00	8.63
	ATOM	1320	NE2	GLN	1011	18.135	37.177	27.609	1.00	11.08
25	ATOM	1321	HE21	GLN	1011	17.587	37.322	26.820	1.00	0.00
	ATOM	1322	HE22	GLN	1011	17.788	37.332	28.506	1.00	0.00
	ATOM	1323	C	GLN	1011	21.023	33.165	24.777	1.00	8.57
	ATOM	1324	O	GLN	1011	22.156	32.816	25.084	1.00	11.00
	ATOM	1325	N	VAL	1012	20.084	32.207	24.590	1.00	9.46
30	ATOM	1326	H	VAL	1012	19.154	32.466	24.464	1.00	0.00
	ATOM	1327	CA	VAL	1012	20.510	30.784	24.674	1.00	7.97
	ATOM	1328	CB	VAL	1012	19.304	29.887	24.602	1.00	7.75
	ATOM	1329	CG1	VAL	1012	19.767	28.394	24.695	1.00	5.22
	ATOM	1330	CG2	VAL	1012	18.334	30.272	25.738	1.00	7.35
35	ATOM	1331	C	VAL	1012	21.477	30.497	23.497	1.00	7.31
	ATOM	1332	O	VAL	1012	22.477	29.812	23.670	1.00	9.28
	ATOM	1333	N	ALA	1013	21.220	30.943	22.263	1.00	7.40
	ATOM	1334	H	ALA	1013	20.356	31.393	22.121	1.00	0.00
	ATOM	1335	CA	ALA	1013	22.152	30.736	21.133	1.00	7.15
40	ATOM	1336	CB	ALA	1013	21.471	31.339	19.846	1.00	8.57
	ATOM	1337	C	ALA	1013	23.541	31.345	21.447	1.00	8.61
	ATOM	1338	O	ALA	1013	24.573	30.763	21.111	1.00	9.63
	ATOM	1339	N	LYS	1014	23.667	32.506	22.115	1.00	9.80
	ATOM	1340	H	LYS	1014	22.861	33.046	22.230	1.00	0.00
45	ATOM	1341	CA	LYS	1014	24.980	33.075	22.527	1.00	8.82
	ATOM	1342	CB	LYS	1014	24.857	34.432	23.307	1.00	4.76
	ATOM	1343	CG	LYS	1014	24.492	35.662	22.521	1.00	10.15
	ATOM	1344	CD	LYS	1014	25.580	36.133	21.536	1.00	8.77
	ATOM	1345	CE	LYS	1014	26.426	37.116	22.296	1.00	12.27
50	ATOM	1346	NZ	LYS	1014	27.391	37.682	21.356	1.00	12.47
	ATOM	1347	HZ1	LYS	1014	26.925	37.952	20.472	1.00	0.00
	ATOM	1348	HZ2	LYS	1014	28.103	36.947	21.175	1.00	0.00
	ATOM	1349	HZ3	LYS	1014	27.842	38.525	21.764	1.00	0.00
	ATOM	1350	C	LYS	1014	25.701	32.112	23.512	1.00	8.17
55	ATOM	1351	O	LYS	1014	26.922	31.884	23.511	1.00	8.92
	ATOM	1352	N	GLY	1015	24.980	31.624	24.515	1.00	8.12
	ATOM	1353	H	GLY	1015	24.067	31.950	24.628	1.00	0.00
	ATOM	1354	CA	GLY	1015	25.530	30.658	25.530	1.00	6.16
	ATOM	1355	C	GLY	1015	26.000	29.370	24.868	1.00	6.55
60	ATOM	1356	O	GLY	1015	27.006	28.811	25.291	1.00	6.23
	ATOM	1357	N	MET	1016	25.234	28.828	23.878	1.00	6.05
	ATOM	1358	H	MET	1016	24.365	29.251	23.714	1.00	0.00

	ATOM	1359	CA	MET	1016	25.599	27.609	23.137	1.00	6.47
	ATOM	1360	CB	MET	1016	24.391	27.159	22.386	1.00	7.33
	ATOM	1361	CG	MET	1016	23.307	26.401	23.213	1.00	8.25
	ATOM	1362	SD	MET	1016	23.948	25.065	24.223	1.00	11.01
5	ATOM	1363	CE	MET	1016	24.843	23.988	23.068	1.00	5.34
	ATOM	1364	C	MET	1016	26.830	27.858	22.193	1.00	10.04
	ATOM	1365	O	MET	1016	27.727	27.019	22.024	1.00	10.42
	ATOM	1366	N	GLU	1017	26.892	29.034	21.545	1.00	9.25
	ATOM	1367	H	GLU	1017	26.091	29.590	21.521	1.00	0.00
10	ATOM	1368	CA	GLU	1017	28.074	29.424	20.769	1.00	9.98
	ATOM	1369	CB	GLU	1017	27.835	30.787	20.207	1.00	6.93
	ATOM	1370	CG	GLU	1017	29.029	31.259	19.417	1.00	7.54
	ATOM	1371	CD	GLU	1017	28.761	32.683	18.981	1.00	13.73
	ATOM	1372	OE1	GLU	1017	28.344	33.449	19.852	1.00	15.46
15	ATOM	1373	OE2	GLU	1017	28.975	33.021	17.803	1.00	16.01
	ATOM	1374	C	GLU	1017	29.235	29.443	21.735	1.00	10.45
	ATOM	1375	O	GLU	1017	30.322	28.939	21.453	1.00	14.15
	ATOM	1376	N	PHE	1018	29.103	30.033	22.926	1.00	10.58
	ATOM	1377	H	PHE	1018	28.327	30.607	23.091	1.00	0.00
20	ATOM	1378	CA	PHE	1018	30.214	29.990	23.916	1.00	10.61
	ATOM	1379	CB	PHE	1018	29.806	30.731	25.251	1.00	11.68
	ATOM	1380	CG	PHE	1018	30.803	30.673	26.385	1.00	13.50
	ATOM	1381	CD1	PHE	1018	30.573	29.896	27.541	1.00	14.72
	ATOM	1382	CD2	PHE	1018	32.003	31.403	26.306	1.00	13.75
25	ATOM	1383	CE1	PHE	1018	31.544	29.841	28.587	1.00	15.11
	ATOM	1384	CE2	PHE	1018	32.951	31.345	27.342	1.00	13.21
	ATOM	1385	CZ	PHE	1018	32.733	30.560	28.489	1.00	11.31
	ATOM	1386	C	PHE	1018	30.566	28.528	24.253	1.00	12.59
	ATOM	1387	O	PHE	1018	31.731	28.111	24.241	1.00	11.76
30	ATOM	1388	N	LEU	1019	29.569	27.683	24.610	1.00	12.49
	ATOM	1389	H	LEU	1019	28.679	28.069	24.758	1.00	0.00
	ATOM	1390	CA	LEU	1019	29.837	26.268	24.928	1.00	12.04
	ATOM	1391	CB	LEU	1019	28.503	25.467	25.129	1.00	14.29
	ATOM	1392	CG	LEU	1019	28.067	25.380	26.613	1.00	24.43
35	ATOM	1393	CD1	LEU	1019	26.724	24.586	26.856	1.00	23.67
	ATOM	1394	CD2	LEU	1019	29.258	24.683	27.354	1.00	23.40
	ATOM	1395	C	LEU	1019	30.657	25.610	23.804	1.00	12.02
	ATOM	1396	O	LEU	1019	31.676	24.946	24.011	1.00	9.68
	ATOM	1397	N	ALA	1020	30.182	25.745	22.576	1.00	12.41
40	ATOM	1398	H	ALA	1020	29.344	26.223	22.433	1.00	0.00
	ATOM	1399	CA	ALA	1020	30.897	25.160	21.427	1.00	11.83
	ATOM	1400	CB	ALA	1020	30.124	25.387	20.119	1.00	9.86
	ATOM	1401	C	ALA	1020	32.265	25.820	21.316	1.00	12.14
	ATOM	1402	O	ALA	1020	33.227	25.183	20.874	1.00	14.46
45	ATOM	1403	N	SER	1021	32.454	27.082	21.638	1.00	12.21
	ATOM	1404	H	SER	1021	31.728	27.619	22.014	1.00	0.00
	ATOM	1405	CA	SER	1021	33.844	27.644	21.537	1.00	13.00
	ATOM	1406	CB	SER	1021	33.848	29.168	21.770	1.00	14.17
	ATOM	1407	OG	SER	1021	33.863	29.519	23.172	1.00	15.03
50	ATOM	1408	HG	SER	1021	34.069	30.465	23.266	1.00	0.00
	ATOM	1409	C	SER	1021	34.834	26.984	22.565	1.00	15.38
	ATOM	1410	O	SER	1021	36.059	27.023	22.414	1.00	16.31
	ATOM	1411	N	ARG	1022	34.354	26.352	23.653	1.00	14.41
	ATOM	1412	H	ARG	1022	33.400	26.474	23.820	1.00	0.00
55	ATOM	1413	CA	ARG	1022	35.174	25.634	24.717	1.00	14.47
	ATOM	1414	CB	ARG	1022	34.526	25.616	26.135	1.00	13.55
	ATOM	1415	CG	ARG	1022	33.830	26.915	26.417	1.00	14.19
	ATOM	1416	CD	ARG	1022	34.773	27.895	27.059	1.00	18.15
	ATOM	1417	NE	ARG	1022	35.940	28.140	26.312	1.00	15.98
60	ATOM	1418	HE	ARG	1022	35.796	28.475	25.403	1.00	0.00
	ATOM	1419	CZ	ARG	1022	37.208	27.948	26.653	1.00	19.02
	ATOM	1420	NH1	ARG	1022	38.107	28.259	25.712	1.00	19.71

	ATOM	1421	HH11	ARG	1022	37.823	28.597	24.815	1.00	0.00
	ATOM	1422	HH12	ARG	1022	39.076	28.137	25.924	1.00	0.00
	ATOM	1423	NH2	ARG	1022	37.663	27.442	27.782	1.00	21.63
	ATOM	1424	HH21	ARG	1022	36.978	27.175	28.459	1.00	0.00
5	ATOM	1425	HH22	ARG	1022	38.636	27.321	27.974	1.00	0.00
	ATOM	1426	C	ARG	1022	35.324	24.159	24.392	1.00	14.47
	ATOM	1427	O	ARG	1022	35.660	23.326	25.226	1.00	12.99
	ATOM	1428	N	LYS	1023	34.825	23.830	23.222	1.00	15.33
	ATOM	1429	H	LYS	1023	34.432	24.554	22.703	1.00	0.00
10	ATOM	1430	CA	LYS	1023	34.779	22.508	22.600	1.00	17.89
	ATOM	1431	CB	LYS	1023	36.250	22.065	22.406	1.00	22.81
	ATOM	1432	CG	LYS	1023	36.911	23.031	21.423	1.00	26.00
	ATOM	1433	CD	LYS	1023	38.377	22.666	21.434	1.00	35.48
	ATOM	1434	CE	LYS	1023	39.202	23.659	20.544	1.00	43.51
15	ATOM	1435	NZ	LYS	1023	38.810	23.652	19.099	1.00	46.80
	ATOM	1436	HZ1	LYS	1023	37.773	23.698	19.023	1.00	0.00
	ATOM	1437	HZ2	LYS	1023	39.168	22.802	18.626	1.00	0.00
	ATOM	1438	HZ3	LYS	1023	39.220	24.499	18.654	1.00	0.00
	ATOM	1439	C	LYS	1023	33.934	21.502	23.397	1.00	16.83
20	ATOM	1440	O	LYS	1023	34.199	20.287	23.557	1.00	12.62
	ATOM	1441	N	CYS	1024	32.834	22.050	23.915	1.00	15.46
	ATOM	1442	H	CYS	1024	32.601	22.986	23.708	1.00	0.00
	ATOM	1443	CA	CYS	1024	31.918	21.199	24.675	1.00	14.09
	ATOM	1444	CB	CYS	1024	31.698	21.753	26.113	1.00	12.39
25	ATOM	1445	SG	CYS	1024	33.236	21.778	27.054	1.00	14.57
	ATOM	1446	C	CYS	1024	30.612	21.124	23.967	1.00	13.46
	ATOM	1447	O	CYS	1024	30.362	21.934	23.078	1.00	12.10
	ATOM	1448	N	ILE	1025	29.808	20.074	24.231	1.00	14.70
	ATOM	1449	H	ILE	1025	30.108	19.364	24.830	1.00	0.00
30	ATOM	1450	CA	ILE	1025	28.453	20.001	23.621	1.00	14.85
	ATOM	1451	CB	ILE	1025	28.395	18.968	22.421	1.00	16.88
	ATOM	1452	CG2	ILE	1025	29.761	18.511	21.859	1.00	19.25
	ATOM	1453	CG1	ILE	1025	27.679	17.811	22.893	1.00	18.10
	ATOM	1454	CD1	ILE	1025	27.340	17.009	21.679	1.00	21.23
35	ATOM	1455	C	ILE	1025	27.544	19.654	24.808	1.00	11.96
	ATOM	1456	O	ILE	1025	27.972	18.997	25.730	1.00	13.55
	ATOM	1457	N	HIS	1026	26.373	20.227	24.935	1.00	10.63
	ATOM	1458	H	HIS	1026	26.162	20.925	24.289	1.00	0.00
	ATOM	1459	CA	HIS	1026	25.411	20.042	26.069	1.00	9.22
40	ATOM	1460	C	HIS	1026	24.810	18.663	26.202	1.00	10.49
	ATOM	1461	O	HIS	1026	24.815	18.051	27.254	1.00	11.75
	ATOM	1462	CB	HIS	1026	24.280	21.126	25.916	1.00	6.98
	ATOM	1463	CG	HIS	1026	23.425	21.211	27.090	1.00	6.84
	ATOM	1464	ND1	HIS	1026	22.431	20.327	27.403	1.00	8.17
45	ATOM	1465	CE1	HIS	1026	21.925	20.707	28.630	1.00	7.86
	ATOM	1466	CD2	HIS	1026	23.542	22.150	28.125	1.00	6.70
	ATOM	1467	NE2	HIS	1026	22.608	21.825	29.072	1.00	9.38
	ATOM	1468	HE2	HIS	1026	22.435	22.294	29.911	1.00	0.00
	ATOM	1469	N	ARG	1027	24.378	18.108	25.081	1.00	10.74
50	ATOM	1470	H	ARG	1027	24.550	18.606	24.261	1.00	0.00
	ATOM	1471	CA	ARG	1027	23.742	16.776	24.986	1.00	12.73
	ATOM	1472	CB	ARG	1027	24.700	15.671	25.468	1.00	12.67
	ATOM	1473	CG	ARG	1027	25.968	15.549	24.601	1.00	9.83
	ATOM	1474	CD	ARG	1027	26.858	14.555	25.387	1.00	10.41
55	ATOM	1475	NE	ARG	1027	28.157	14.410	24.699	1.00	15.10
	ATOM	1476	HE	ARG	1027	28.264	13.709	24.019	1.00	0.00
	ATOM	1477	CZ	ARG	1027	29.182	15.226	24.985	1.00	13.83
	ATOM	1478	NH1	ARG	1027	30.307	15.076	24.330	1.00	13.04
	ATOM	1479	HH11	ARG	1027	30.391	14.366	23.636	1.00	0.00
60	ATOM	1480	HH12	ARG	1027	31.086	15.667	24.525	1.00	0.00
	ATOM	1481	NH2	ARG	1027	29.086	16.150	25.949	1.00	10.90
	ATOM	1482	HH21	ARG	1027	28.239	16.259	26.465	1.00	0.00



	ATOM	1483	HH22	ARG	1027	29.868	16.729	26.151	1.00	0.00
	ATOM	1484	C	ARG	1027	22.375	16.622	25.693	1.00	13.99
	ATOM	1485	O	ARG	1027	21.731	15.565	25.574	1.00	16.20
	ATOM	1486	N	ASP	1028	21.843	17.677	26.341	1.00	13.69
5	ATOM	1487	H	ASP	1028	22.452	18.401	26.590	1.00	0.00
	ATOM	1488	CA	ASP	1028	20.468	17.630	26.910	1.00	12.87
	ATOM	1489	CB	ASP	1028	20.446	17.127	28.378	1.00	12.03
	ATOM	1490	CG	ASP	1028	19.026	16.750	28.811	1.00	11.69
	ATOM	1491	OD1	ASP	1028	18.871	16.469	29.986	1.00	14.54
10	ATOM	1492	OD2	ASP	1028	18.045	16.750	28.055	1.00	13.13
	ATOM	1493	C	ASP	1028	19.844	19.036	26.877	1.00	12.52
	ATOM	1494	O	ASP	1028	19.275	19.582	27.864	1.00	12.26
	ATOM	1495	N	LEU	1029	20.013	19.698	25.713	1.00	10.66
	ATOM	1496	H	LEU	1029	20.579	19.360	25.003	1.00	0.00
15	ATOM	1497	CA	LEU	1029	19.438	21.049	25.629	1.00	10.05
	ATOM	1498	CB	LEU	1029	20.055	21.804	24.444	1.00	9.87
	ATOM	1499	CG	LEU	1029	19.745	23.331	24.447	1.00	11.08
	ATOM	1500	CD1	LEU	1029	20.401	24.117	25.641	1.00	10.83
	ATOM	1501	CD2	LEU	1029	20.355	23.900	23.150	1.00	11.31
20	ATOM	1502	C	LEU	1029	17.903	21.020	25.535	1.00	10.51
	ATOM	1503	O	LEU	1029	17.300	20.316	24.724	1.00	8.73
	ATOM	1504	N	ALA	1030	17.265	21.842	26.370	1.00	10.79
	ATOM	1505	H	ALA	1030	17.822	22.388	26.964	1.00	0.00
	ATOM	1506	CA	ALA	1030	15.796	21.933	26.476	1.00	10.11
25	ATOM	1507	CB	ALA	1030	15.238	20.607	27.134	1.00	6.52
	ATOM	1508	C	ALA	1030	15.443	23.129	27.359	1.00	11.69
	ATOM	1509	O	ALA	1030	16.298	23.600	28.125	1.00	12.45
	ATOM	1510	N	ALA	1031	14.213	23.651	27.302	1.00	10.56
	ATOM	1511	H	ALA	1031	13.647	23.371	26.568	1.00	0.00
30	ATOM	1512	CA	ALA	1031	13.843	24.803	28.171	1.00	10.42
	ATOM	1513	CB	ALA	1031	12.428	25.313	27.770	1.00	6.37
	ATOM	1514	C	ALA	1031	13.910	24.473	29.688	1.00	9.09
	ATOM	1515	O	ALA	1031	14.209	25.307	30.534	1.00	6.26
	ATOM	1516	N	ARG	1032	13.675	23.215	30.034	1.00	10.67
35	ATOM	1517	H	ARG	1032	13.291	22.626	29.355	1.00	0.00
	ATOM	1518	CA	ARG	1032	13.795	22.686	31.422	1.00	9.19
	ATOM	1519	CB	ARG	1032	13.526	21.183	31.448	1.00	11.09
	ATOM	1520	CG	ARG	1032	14.574	20.281	30.757	1.00	6.49
	ATOM	1521	CD	ARG	1032	14.614	18.710	31.028	1.00	13.42
40	ATOM	1522	NE	ARG	1032	13.960	18.263	29.846	1.00	16.78
	ATOM	1523	HE	ARG	1032	13.001	18.479	29.881	1.00	0.00
	ATOM	1524	CZ	ARG	1032	14.282	17.665	28.723	1.00	13.73
	ATOM	1525	NH1	ARG	1032	13.187	17.637	28.035	1.00	15.98
	ATOM	1526	HH11	ARG	1032	12.348	18.031	28.412	1.00	0.00
45	ATOM	1527	HH12	ARG	1032	13.198	17.228	27.128	1.00	0.00
	ATOM	1528	NH2	ARG	1032	15.375	17.139	28.213	1.00	14.13
	ATOM	1529	HH21	ARG	1032	16.220	17.136	28.748	1.00	0.00
	ATOM	1530	HH22	ARG	1032	15.350	16.738	27.301	1.00	0.00
	ATOM	1531	C	ARG	1032	15.208	22.914	31.922	1.00	11.22
50	ATOM	1532	O	ARG	1032	15.509	22.945	33.122	1.00	11.21
	ATOM	1533	N	ASN	1033	16.168	22.894	30.988	1.00	11.36
	ATOM	1534	H	ASN	1033	15.926	22.729	30.056	1.00	0.00
	ATOM	1535	CA	ASN	1033	17.595	23.168	31.340	1.00	11.75
	ATOM	1536	CB	ASN	1033	18.525	22.199	30.567	1.00	10.47
55	ATOM	1537	CG	ASN	1033	18.570	20.885	31.336	1.00	9.64
	ATOM	1538	OD1	ASN	1033	18.513	20.835	32.561	1.00	8.65
	ATOM	1539	ND2	ASN	1033	18.687	19.759	30.673	1.00	10.81
	ATOM	1540	HD21	ASN	1033	18.759	19.767	29.697	1.00	0.00
	ATOM	1541	HD22	ASN	1033	18.709	18.900	31.132	1.00	0.00
60	ATOM	1542	C	ASN	1033	18.040	24.618	31.113	1.00	9.05
	ATOM	1543	O	ASN	1033	19.228	24.946	30.995	1.00	10.84
	ATOM	1544	N	ILE	1034	17.078	25.514	31.030	1.00	9.16

	ATOM	1545	H	ILE	1034	16.149	25.236	31.141	1.00	0.00
	ATOM	1546	CA	ILE	1034	17.403	26.944	30.862	1.00	9.34
	ATOM	1547	CB	ILE	1034	16.752	27.614	29.606	1.00	7.21
	ATOM	1548	CG2	ILE	1034	17.164	29.153	29.643	1.00	9.24
5	ATOM	1549	CG1	ILE	1034	17.184	26.971	28.281	1.00	5.02
	ATOM	1550	CD1	ILE	1034	18.689	26.900	28.009	1.00	2.00
	ATOM	1551	C	ILE	1034	16.873	27.660	32.090	1.00	9.90
	ATOM	1552	O	ILE	1034	15.774	27.366	32.557	1.00	10.84
	ATOM	1553	N	LEU	1035	17.714	28.438	32.735	1.00	9.12
10	ATOM	1554	H	LEU	1035	18.641	28.401	32.463	1.00	0.00
	ATOM	1555	CA	LEU	1035	17.319	29.207	33.901	1.00	10.48
	ATOM	1556	CB	LEU	1035	18.405	29.071	34.986	1.00	10.95
	ATOM	1557	CG	LEU	1035	18.601	27.645	35.532	1.00	6.61
	ATOM	1558	CD1	LEU	1035	19.771	27.734	36.442	1.00	7.72
15	ATOM	1559	CD2	LEU	1035	17.393	27.063	36.292	1.00	11.29
	ATOM	1560	C	LEU	1035	17.045	30.706	33.668	1.00	12.33
	ATOM	1561	O	LEU	1035	17.762	31.392	32.914	1.00	12.66
	ATOM	1562	N	LEU	1036	15.984	31.244	34.273	1.00	11.39
	ATOM	1563	H	LEU	1036	15.359	30.661	34.748	1.00	0.00
20	ATOM	1564	CA	LEU	1036	15.718	32.691	34.166	1.00	13.22
	ATOM	1565	CB	LEU	1036	14.188	32.960	33.846	1.00	9.17
	ATOM	1566	CG	LEU	1036	13.851	34.460	33.847	1.00	7.71
	ATOM	1567	CD1	LEU	1036	14.548	35.257	32.705	1.00	3.52
	ATOM	1568	CD2	LEU	1036	12.365	34.565	33.676	1.00	9.99
25	ATOM	1569	C	LEU	1036	16.141	33.431	35.472	1.00	14.02
	ATOM	1570	O	LEU	1036	15.777	33.086	36.585	1.00	12.00
	ATOM	1571	N	SER	1037	17.061	34.377	35.311	1.00	17.18
	ATOM	1572	H	SER	1037	17.344	34.481	34.384	1.00	0.00
	ATOM	1573	CA	SER	1037	17.666	35.267	36.330	1.00	18.81
30	ATOM	1574	CB	SER	1037	19.155	35.372	36.002	1.00	19.50
	ATOM	1575	OG	SER	1037	19.864	35.418	37.222	1.00	22.75
	ATOM	1576	HG	SER	1037	20.693	35.877	37.013	1.00	0.00
	ATOM	1577	C	SER	1037	16.996	36.637	36.305	1.00	20.71
	ATOM	1578	O	SER	1037	15.974	36.840	35.621	1.00	18.30
35	ATOM	1579	N	GLU	1038	17.433	37.645	37.051	1.00	24.83
	ATOM	1580	H	GLU	1038	18.195	37.490	37.636	1.00	0.00
	ATOM	1581	CA	GLU	1038	16.678	38.929	36.897	1.00	29.35
	ATOM	1582	CB	GLU	1038	16.789	40.018	37.980	1.00	36.02
	ATOM	1583	CG	GLU	1038	17.462	39.622	39.274	1.00	45.61
40	ATOM	1584	CD	GLU	1038	18.907	39.258	39.019	1.00	55.80
	ATOM	1585	OE1	GLU	1038	19.456	38.504	39.853	1.00	60.40
	ATOM	1586	OE2	GLU	1038	19.497	39.799	38.062	1.00	60.58
	ATOM	1587	C	GLU	1038	17.205	39.656	35.708	1.00	28.01
	ATOM	1588	O	GLU	1038	18.102	39.163	35.025	1.00	25.32
45	ATOM	1589	N	LYS	1039	16.645	40.831	35.413	1.00	27.99
	ATOM	1590	H	LYS	1039	15.890	41.133	35.953	1.00	0.00
	ATOM	1591	CA	LYS	1039	17.059	41.651	34.241	1.00	27.75
	ATOM	1592	CB	LYS	1039	18.522	42.171	34.457	1.00	29.69
	ATOM	1593	CG	LYS	1039	18.775	42.884	35.814	1.00	36.47
50	ATOM	1594	CD	LYS	1039	17.989	44.225	36.092	1.00	43.35
	ATOM	1595	CE	LYS	1039	16.412	44.396	35.910	1.00	48.13
	ATOM	1596	NZ	LYS	1039	16.046	44.712	34.492	1.00	52.56
	ATOM	1597	HZ1	LYS	1039	16.473	44.019	33.838	1.00	0.00
	ATOM	1598	HZ2	LYS	1039	16.413	45.657	34.250	1.00	0.00
55	ATOM	1599	HZ3	LYS	1039	15.017	44.707	34.360	1.00	0.00
	ATOM	1600	C	LYS	1039	16.950	40.886	32.938	1.00	24.36
	ATOM	1601	O	LYS	1039	17.691	41.104	31.982	1.00	25.46
	ATOM	1602	N	ASN	1040	15.962	40.005	32.887	1.00	21.96
	ATOM	1603	H	ASN	1040	15.392	39.897	33.674	1.00	0.00
60	ATOM	1604	CA	ASN	1040	15.710	39.122	31.706	1.00	21.19
	ATOM	1605	CB	ASN	1040	15.119	39.961	30.508	1.00	20.45
	ATOM	1606	CG	ASN	1040	13.714	40.284	30.979	1.00	22.14

	ATOM	1607	OD1	ASN	1040	12.840	39.448	31.239	1.00	23.40
	ATOM	1608	ND2	ASN	1040	13.437	41.532	31.224	1.00	25.07
	ATOM	1609	HD21	ASN	1040	14.084	42.245	31.100	1.00	0.00
	ATOM	1610	HD22	ASN	1040	12.529	41.731	31.525	1.00	0.00
5	ATOM	1611	C	ASN	1040	16.894	38.273	31.213	1.00	17.74
	ATOM	1612	O	ASN	1040	16.882	37.745	30.096	1.00	19.56
	ATOM	1613	N	VAL	1041	17.906	38.081	32.064	1.00	15.84
	ATOM	1614	H	VAL	1041	17.869	38.522	32.939	1.00	0.00
	ATOM	1615	CA	VAL	1041	19.059	37.228	31.727	1.00	13.19
10	ATOM	1616	CB	VAL	1041	20.286	37.563	32.576	1.00	13.28
	ATOM	1617	CG1	VAL	1041	21.336	36.499	32.315	1.00	9.61
	ATOM	1618	CG2	VAL	1041	20.768	39.031	32.270	1.00	13.16
	ATOM	1619	C	VAL	1041	18.721	35.774	31.940	1.00	13.16
	ATOM	1620	O	VAL	1041	18.232	35.331	32.957	1.00	12.56
15	ATOM	1621	N	VAL	1042	18.904	35.013	30.897	1.00	15.03
	ATOM	1622	H	VAL	1042	19.271	35.463	30.101	1.00	0.00
	ATOM	1623	CA	VAL	1042	18.649	33.569	30.817	1.00	14.96
	ATOM	1624	CB	VAL	1042	17.698	33.509	29.532	1.00	18.56
	ATOM	1625	CG1	VAL	1042	18.365	32.791	28.344	1.00	15.85
20	ATOM	1626	CG2	VAL	1042	16.329	33.036	30.017	1.00	14.58
	ATOM	1627	C	VAL	1042	20.015	32.850	30.774	1.00	15.57
	ATOM	1628	O	VAL	1042	20.947	33.312	30.085	1.00	14.75
	ATOM	1629	N	LYS	1043	20.145	31.764	31.562	1.00	12.56
	ATOM	1630	H	LYS	1043	19.370	31.524	32.101	1.00	0.00
25	ATOM	1631	CA	LYS	1043	21.348	30.947	31.657	1.00	9.54
	ATOM	1632	CB	LYS	1043	21.942	31.062	33.084	1.00	9.57
	ATOM	1633	CG	LYS	1043	22.641	32.436	33.176	1.00	11.90
	ATOM	1634	CD	LYS	1043	22.870	32.850	34.631	1.00	13.24
	ATOM	1635	CE	LYS	1043	23.518	34.254	34.779	1.00	14.88
30	ATOM	1636	NZ	LYS	1043	24.927	34.112	34.375	1.00	18.33
	ATOM	1637	HZ1	LYS	1043	24.962	33.603	33.471	1.00	0.00
	ATOM	1638	HZ2	LYS	1043	25.472	33.588	35.079	1.00	0.00
	ATOM	1639	HZ3	LYS	1043	25.358	35.048	34.245	1.00	0.00
	ATOM	1640	C	LYS	1043	21.165	29.466	31.344	1.00	10.95
35	ATOM	1641	O	LYS	1043	20.255	28.758	31.775	1.00	11.40
	ATOM	1642	N	ILE	1044	22.033	28.930	30.519	1.00	11.34
	ATOM	1643	H	ILE	1044	22.662	29.532	30.064	1.00	0.00
	ATOM	1644	CA	ILE	1044	21.997	27.509	30.213	1.00	10.08
	ATOM	1645	CB	ILE	1044	22.864	27.220	28.925	1.00	11.69
40	ATOM	1646	CG2	ILE	1044	22.933	25.666	28.804	1.00	10.94
	ATOM	1647	CG1	ILE	1044	22.334	27.969	27.651	1.00	7.49
	ATOM	1648	CD1	ILE	1044	23.351	27.794	26.585	1.00	4.06
	ATOM	1649	C	ILE	1044	22.582	26.726	31.408	1.00	11.61
	ATOM	1650	O	ILE	1044	23.648	27.073	31.976	1.00	9.99
45	ATOM	1651	N	CYS	1045	21.892	25.664	31.829	1.00	10.61
	ATOM	1652	H	CYS	1045	21.055	25.439	31.375	1.00	0.00
	ATOM	1653	CA	CYS	1045	22.406	24.800	32.958	1.00	9.79
	ATOM	1654	CB	CYS	1045	21.660	25.076	34.350	1.00	8.31
	ATOM	1655	SG	CYS	1045	19.915	24.438	34.310	1.00	10.37
50	ATOM	1656	C	CYS	1045	22.167	23.316	32.598	1.00	9.48
	ATOM	1657	O	CYS	1045	21.717	22.927	31.511	1.00	8.76
	ATOM	1658	N	ASP	1046	22.595	22.415	33.436	1.00	7.87
	ATOM	1659	H	ASP	1046	23.148	22.686	34.200	1.00	0.00
	ATOM	1660	CA	ASP	1046	22.328	21.023	33.162	1.00	7.87
55	ATOM	1661	CB	ASP	1046	23.585	20.291	32.617	1.00	9.37
	ATOM	1662	CG	ASP	1046	23.262	18.868	32.170	1.00	11.43
	ATOM	1663	OD1	ASP	1046	22.226	18.314	32.468	1.00	14.63
	ATOM	1664	OD2	ASP	1046	24.038	18.283	31.440	1.00	17.23
	ATOM	1665	C	ASP	1046	21.958	20.443	34.526	1.00	9.02
60	ATOM	1666	O	ASP	1046	22.910	20.306	35.294	1.00	8.55
	ATOM	1667	N	PHE	1047	20.654	20.175	34.866	1.00	7.75
	ATOM	1668	H	PHE	1047	19.946	20.573	34.318	1.00	0.00

	ATOM	1669	CA	PHE	1047	20.293	19.578	36.165	1.00	8.31
	ATOM	1670	CB	PHE	1047	18.768	19.294	36.318	1.00	8.07
	ATOM	1671	CG	PHE	1047	18.080	20.506	36.782	1.00	7.57
	ATOM	1672	CD1	PHE	1047	17.852	21.569	35.913	1.00	8.44
5	ATOM	1673	CD2	PHE	1047	17.615	20.573	38.110	1.00	10.21
	ATOM	1674	CE1	PHE	1047	17.145	22.707	36.349	1.00	9.62
	ATOM	1675	CE2	PHE	1047	16.910	21.689	38.545	1.00	10.56
	ATOM	1676	CZ	PHE	1047	16.668	22.762	37.673	1.00	12.10
	ATOM	1677	C	PHE	1047	21.009	18.273	36.378	1.00	9.17
10	ATOM	1678	O	PHE	1047	21.472	17.919	37.477	1.00	9.77
	ATOM	1679	N	GLY	1048	21.121	17.499	35.320	1.00	10.49
	ATOM	1680	H	GLY	1048	20.700	17.793	34.493	1.00	0.00
	ATOM	1681	CA	GLY	1048	21.839	16.221	35.365	1.00	9.67
	ATOM	1682	C	GLY	1048	21.333	15.323	36.487	1.00	12.55
15	ATOM	1683	O	GLY	1048	20.136	15.036	36.597	1.00	14.91
	ATOM	1684	N	LEU	1049	22.224	14.942	37.385	1.00	14.19
	ATOM	1685	H	LEU	1049	23.112	15.357	37.324	1.00	0.00
	ATOM	1686	CA	LEU	1049	21.836	14.046	38.481	1.00	15.61
	ATOM	1687	CB	LEU	1049	23.079	13.694	39.303	1.00	19.24
20	ATOM	1688	CG	LEU	1049	23.981	12.438	39.035	1.00	22.75
	ATOM	1689	CD1	LEU	1049	23.880	11.802	37.633	1.00	22.87
	ATOM	1690	CD2	LEU	1049	25.384	12.928	39.431	1.00	22.76
	ATOM	1691	C	LEU	1049	20.777	14.690	39.342	1.00	14.81
	ATOM	1692	O	LEU	1049	20.010	13.960	39.980	1.00	15.38
25	ATOM	1693	N	ALA	1050	20.693	16.041	39.378	1.00	11.88
	ATOM	1694	H	ALA	1050	21.360	16.569	38.888	1.00	0.00
	ATOM	1695	CA	ALA	1050	19.647	16.688	40.210	1.00	11.99
	ATOM	1696	CB	ALA	1050	19.893	18.184	40.463	1.00	7.80
	ATOM	1697	C	ALA	1050	18.277	16.583	39.553	1.00	12.29
30	ATOM	1698	O	ALA	1050	17.314	17.249	39.934	1.00	11.89
	ATOM	1699	N	ARG	1051	18.156	15.783	38.500	1.00	14.11
	ATOM	1700	H	ARG	1051	18.922	15.289	38.141	1.00	0.00
	ATOM	1701	CA	ARG	1051	16.850	15.630	37.878	1.00	17.49
	ATOM	1702	CB	ARG	1051	16.850	16.068	36.409	1.00	16.90
35	ATOM	1703	CG	ARG	1051	15.399	15.930	35.894	1.00	14.56
	ATOM	1704	CD	ARG	1051	15.273	16.340	34.472	1.00	17.05
	ATOM	1705	NE	ARG	1051	15.182	17.813	34.459	1.00	15.27
	ATOM	1706	HE	ARG	1051	14.384	18.221	34.859	1.00	0.00
	ATOM	1707	CZ	ARG	1051	16.126	18.616	33.927	1.00	14.54
40	ATOM	1708	NH1	ARG	1051	15.909	19.926	33.978	1.00	12.19
	ATOM	1709	HH11	ARG	1051	15.067	20.272	34.398	1.00	0.00
	ATOM	1710	HH12	ARG	1051	16.583	20.561	33.602	1.00	0.00
	ATOM	1711	NH2	ARG	1051	17.273	18.147	33.374	1.00	15.98
	ATOM	1712	HH21	ARG	1051	17.455	17.165	33.356	1.00	0.00
45	ATOM	1713	HH22	ARG	1051	17.923	18.795	32.977	1.00	0.00
	ATOM	1714	C	ARG	1051	16.448	14.174	37.936	1.00	20.25
	ATOM	1715	O	ARG	1051	17.279	13.276	37.756	1.00	18.31
	ATOM	1716	N	ASP	1052	15.214	13.937	38.348	1.00	23.67
	ATOM	1717	H	ASP	1052	14.683	14.685	38.682	1.00	0.00
50	ATOM	1718	CA	ASP	1052	14.720	12.536	38.408	1.00	28.87
	ATOM	1719	CB	ASP	1052	13.498	12.408	39.382	1.00	33.96
	ATOM	1720	CG	ASP	1052	13.253	10.968	39.921	1.00	39.68
	ATOM	1721	OD1	ASP	1052	13.767	9.963	39.374	1.00	40.34
	ATOM	1722	OD2	ASP	1052	12.511	10.899	40.923	1.00	43.88
55	ATOM	1723	C	ASP	1052	14.298	12.045	37.004	1.00	27.42
	ATOM	1724	O	ASP	1052	13.113	12.014	36.647	1.00	26.06
	ATOM	1725	N	ILE	1053	15.258	11.631	36.194	1.00	26.62
	ATOM	1726	H	ILE	1053	16.188	11.719	36.489	1.00	0.00
	ATOM	1727	CA	ILE	1053	14.918	11.187	34.830	1.00	28.09
60	ATOM	1728	CB	ILE	1053	16.175	10.884	33.934	1.00	27.47
	ATOM	1729	CG2	ILE	1053	16.889	12.245	33.660	1.00	23.05
	ATOM	1730	CG1	ILE	1053	17.035	9.749	34.552	1.00	23.01

	ATOM	1731	CD1	ILE	1053	17.858	9.197	33.398	1.00	23.35
	ATOM	1732	C	ILE	1053	14.055	9.959	34.788	1.00	30.28
	ATOM	1733	O	ILE	1053	13.642	9.582	33.695	1.00	30.40
	ATOM	1734	N	TYR	1054	13.922	9.234	35.915	1.00	32.32
5	ATOM	1735	H	TYR	1054	14.483	9.440	36.691	1.00	0.00
	ATOM	1736	CA	TYR	1054	13.018	8.056	35.880	1.00	33.97
	ATOM	1737	CB	TYR	1054	13.479	6.971	36.888	1.00	38.47
	ATOM	1738	CG	TYR	1054	14.775	6.491	36.316	1.00	45.06
	ATOM	1739	CD1	TYR	1054	15.991	6.664	37.033	1.00	47.12
10	ATOM	1740	CE1	TYR	1054	17.232	6.322	36.454	1.00	47.98
	ATOM	1741	CD2	TYR	1054	14.813	5.950	35.010	1.00	47.93
	ATOM	1742	CE2	TYR	1054	16.057	5.610	34.433	1.00	49.46
	ATOM	1743	CZ	TYR	1054	17.268	5.802	35.143	1.00	49.10
	ATOM	1744	OH	TYR	1054	18.493	5.603	34.492	1.00	51.35
15	ATOM	1745	HH	TYR	1054	18.341	5.072	33.705	1.00	0.00
	ATOM	1746	C	TYR	1054	11.589	8.461	36.128	1.00	32.04
	ATOM	1747	O	TYR	1054	10.669	7.800	35.663	1.00	33.39
	ATOM	1748	N	LYS	1055	11.355	9.520	36.888	1.00	29.69
	ATOM	1749	H	LYS	1055	12.107	10.043	37.225	1.00	0.00
20	ATOM	1750	CA	LYS	1055	9.964	9.949	37.088	1.00	28.93
	ATOM	1751	CB	LYS	1055	9.790	10.467	38.528	1.00	27.00
	ATOM	1752	C	LYS	1055	9.545	11.066	36.059	1.00	29.21
	ATOM	1753	O	LYS	1055	8.366	11.364	35.786	1.00	28.05
	ATOM	1754	N	ASP	1056	10.537	11.740	35.453	1.00	27.94
25	ATOM	1755	H	ASP	1056	11.461	11.468	35.610	1.00	0.00
	ATOM	1756	CA	ASP	1056	10.242	12.822	34.508	1.00	24.87
	ATOM	1757	CB	ASP	1056	11.519	13.674	34.374	1.00	25.78
	ATOM	1758	CG	ASP	1056	11.298	15.021	33.685	1.00	25.28
	ATOM	1759	OD1	ASP	1056	12.067	15.910	33.964	1.00	30.36
30	ATOM	1760	OD2	ASP	1056	10.421	15.225	32.856	1.00	26.40
	ATOM	1761	C	ASP	1056	9.741	12.361	33.141	1.00	23.43
	ATOM	1762	O	ASP	1056	10.502	11.747	32.401	1.00	22.01
	ATOM	1763	N	PRO	1057	8.489	12.739	32.729	1.00	21.95
	ATOM	1764	CD	PRO	1057	7.567	13.668	33.417	1.00	18.33
35	ATOM	1765	CA	PRO	1057	7.909	12.286	31.441	1.00	20.12
	ATOM	1766	CB	PRO	1057	6.511	12.885	31.507	1.00	18.14
	ATOM	1767	CG	PRO	1057	6.694	14.181	32.297	1.00	17.76
	ATOM	1768	C	PRO	1057	8.734	12.655	30.168	1.00	20.26
	ATOM	1769	O	PRO	1057	8.606	12.051	29.098	1.00	21.56
40	ATOM	1770	N	ASP	1058	9.587	13.684	30.210	1.00	18.09
	ATOM	1771	H	ASP	1058	9.613	14.207	31.033	1.00	0.00
	ATOM	1772	CA	ASP	1058	10.434	14.056	29.046	1.00	15.51
	ATOM	1773	CB	ASP	1058	11.107	15.361	29.351	1.00	14.15
	ATOM	1774	CG	ASP	1058	10.173	16.493	29.574	1.00	13.39
45	ATOM	1775	OD1	ASP	1058	10.650	17.488	30.050	1.00	15.70
	ATOM	1776	OD2	ASP	1058	9.012	16.472	29.220	1.00	17.87
	ATOM	1777	C	ASP	1058	11.539	13.010	28.721	1.00	16.99
	ATOM	1778	O	ASP	1058	12.246	13.115	27.715	1.00	16.49
	ATOM	1779	N	TYR	1059	11.873	12.101	29.657	1.00	16.57
50	ATOM	1780	H	TYR	1059	11.359	12.038	30.495	1.00	0.00
	ATOM	1781	CA	TYR	1059	12.914	11.092	29.385	1.00	17.68
	ATOM	1782	CB	TYR	1059	13.955	11.014	30.528	1.00	15.96
	ATOM	1783	CG	TYR	1059	14.552	12.341	30.674	1.00	14.86
	ATOM	1784	CD1	TYR	1059	13.904	13.360	31.381	1.00	13.40
55	ATOM	1785	CE1	TYR	1059	14.485	14.623	31.460	1.00	13.99
	ATOM	1786	CD2	TYR	1059	15.777	12.558	30.050	1.00	15.00
	ATOM	1787	CE2	TYR	1059	16.352	13.824	30.134	1.00	14.01
	ATOM	1788	CZ	TYR	1059	15.711	14.854	30.829	1.00	15.08
	ATOM	1789	OH	TYR	1059	16.299	16.110	30.867	1.00	15.86
60	ATOM	1790	HH	TYR	1059	16.036	16.560	31.673	1.00	0.00
	ATOM	1791	C	TYR	1059	12.277	9.734	29.205	1.00	21.10
	ATOM	1792	O	TYR	1059	11.665	9.135	30.092	1.00	24.79

	ATOM	1793	N	VAL	1060	12.325	9.283	27.979	1.00	22.24
	ATOM	1794	H	VAL	1060	12.669	9.898	27.312	1.00	0.00
	ATOM	1795	CA	VAL	1060	11.742	8.029	27.564	1.00	23.11
	ATOM	1796	CB	VAL	1060	11.071	8.388	26.254	1.00	22.46
5	ATOM	1797	CG1	VAL	1060	10.491	7.145	25.649	1.00	25.32
	ATOM	1798	CG2	VAL	1060	9.935	9.406	26.489	1.00	22.78
	ATOM	1799	C	VAL	1060	12.768	6.937	27.484	1.00	25.40
	ATOM	1800	O	VAL	1060	13.882	7.084	26.991	1.00	24.61
	ATOM	1801	N	ARG	1061	12.400	5.782	28.015	1.00	30.80
10	ATOM	1802	H	ARG	1061	11.497	5.733	28.380	1.00	0.00
	ATOM	1803	CA	ARG	1061	13.282	4.564	28.023	1.00	34.53
	ATOM	1804	CB	ARG	1061	12.652	3.354	28.805	1.00	34.35
	ATOM	1805	C	ARG	1061	13.615	4.018	26.613	1.00	36.51
	ATOM	1806	O	ARG	1061	12.749	3.748	25.763	1.00	36.42
15	ATOM	1807	N	LYS	1062	14.911	3.879	26.403	1.00	38.48
	ATOM	1808	H	LYS	1062	15.496	4.242	27.088	1.00	0.00
	ATOM	1809	CA	LYS	1062	15.505	3.366	25.176	1.00	41.27
	ATOM	1810	CB	LYS	1062	15.904	4.549	24.275	1.00	41.79
	ATOM	1811	C	LYS	1062	16.716	2.574	25.677	1.00	43.77
20	ATOM	1812	O	LYS	1062	17.708	3.063	26.242	1.00	43.79
	ATOM	1813	N	GLY	1063	16.581	1.250	25.513	1.00	46.39
	ATOM	1814	H	GLY	1063	15.770	0.942	25.064	1.00	0.00
	ATOM	1815	CA	GLY	1063	17.582	0.279	26.004	1.00	46.40
	ATOM	1816	C	GLY	1063	17.581	0.397	27.545	1.00	47.48
25	ATOM	1817	O	GLY	1063	16.550	0.314	28.223	1.00	47.46
	ATOM	1818	N	ASP	1064	18.748	0.532	28.142	1.00	49.07
	ATOM	1819	H	ASP	1064	19.553	0.570	27.589	1.00	0.00
	ATOM	1820	CA	ASP	1064	18.826	0.725	29.617	1.00	51.06
	ATOM	1821	CB	ASP	1064	20.028	-0.059	30.257	1.00	56.05
30	ATOM	1822	CG	ASP	1064	19.702	-1.545	30.444	1.00	60.81
	ATOM	1823	OD1	ASP	1064	18.725	-1.865	31.141	1.00	63.43
	ATOM	1824	OD2	ASP	1064	20.446	-2.368	29.899	1.00	63.06
	ATOM	1825	C	ASP	1064	19.002	2.231	29.969	1.00	49.11
	ATOM	1826	O	ASP	1064	19.413	2.601	31.078	1.00	49.97
35	ATOM	1827	N	ALA	1065	18.710	3.132	29.009	1.00	44.21
	ATOM	1828	H	ALA	1065	18.384	2.830	28.133	1.00	0.00
	ATOM	1829	CA	ALA	1065	18.844	4.583	29.220	1.00	38.56
	ATOM	1830	CB	ALA	1065	19.775	5.181	28.158	1.00	36.16
	ATOM	1831	C	ALA	1065	17.490	5.251	29.101	1.00	35.55
40	ATOM	1832	O	ALA	1065	16.635	4.782	28.352	1.00	35.47
	ATOM	1833	N	ARG	1066	17.206	6.245	29.941	1.00	30.54
	ATOM	1834	H	ARG	1066	17.865	6.479	30.622	1.00	0.00
	ATOM	1835	CA	ARG	1066	15.936	6.985	29.823	1.00	27.55
	ATOM	1836	CB	ARG	1066	15.347	7.230	31.253	1.00	25.84
45	ATOM	1837	C	ARG	1066	16.347	8.298	29.062	1.00	24.84
	ATOM	1838	O	ARG	1066	17.048	9.170	29.585	1.00	23.59
	ATOM	1839	N	LEU	1067	16.025	8.387	27.768	1.00	20.83
	ATOM	1840	H	LEU	1067	15.576	7.616	27.375	1.00	0.00
	ATOM	1841	CA	LEU	1067	16.400	9.511	26.911	1.00	18.67
50	ATOM	1842	CB	LEU	1067	16.818	8.933	25.600	1.00	17.20
	ATOM	1843	CG	LEU	1067	17.879	7.828	25.715	1.00	18.31
	ATOM	1844	CD1	LEU	1067	18.157	7.336	24.301	1.00	18.81
	ATOM	1845	CD2	LEU	1067	19.166	8.315	26.388	1.00	19.05
	ATOM	1846	C	LEU	1067	15.426	10.624	26.653	1.00	16.51
55	ATOM	1847	O	LEU	1067	14.263	10.307	26.483	1.00	17.65
	ATOM	1848	N	PRO	1068	15.859	11.906	26.485	1.00	14.89
	ATOM	1849	CD	PRO	1068	17.248	12.393	26.624	1.00	12.11
	ATOM	1850	CA	PRO	1068	14.999	13.049	26.101	1.00	13.38
	ATOM	1851	CB	PRO	1068	15.751	14.347	26.445	1.00	9.78
60	ATOM	1852	CG	PRO	1068	17.169	13.869	26.202	1.00	11.56
	ATOM	1853	C	PRO	1068	14.662	12.991	24.614	1.00	13.13
	ATOM	1854	O	PRO	1068	14.937	13.928	23.856	1.00	8.35

	ATOM	1855	N	LEU	1069	13.916	11.923	24.252	1.00	14.63
	ATOM	1856	H	LEU	1069	13.627	11.289	24.950	1.00	0.00
	ATOM	1857	CA	LEU	1069	13.535	11.620	22.857	1.00	16.25
	ATOM	1858	CB	LEU	1069	12.570	10.364	22.928	1.00	21.17
5	ATOM	1859	CG	LEU	1069	13.053	8.875	22.657	1.00	24.49
	ATOM	1860	CD1	LEU	1069	14.331	8.955	21.788	1.00	26.99
	ATOM	1861	CD2	LEU	1069	13.578	8.124	23.868	1.00	26.30
	ATOM	1862	C	LEU	1069	12.942	12.758	21.974	1.00	13.96
	ATOM	1863	O	LEU	1069	13.309	12.963	20.814	1.00	10.39
10	ATOM	1864	N	LYS	1070	12.064	13.577	22.549	1.00	11.37
	ATOM	1865	H	LYS	1070	11.978	13.445	23.507	1.00	0.00
	ATOM	1866	CA	LYS	1070	11.424	14.676	21.779	1.00	13.01
	ATOM	1867	CB	LYS	1070	10.246	15.261	22.572	1.00	10.05
	ATOM	1868	CG	LYS	1070	9.191	14.200	22.625	1.00	11.24
15	ATOM	1869	CD	LYS	1070	7.911	14.802	23.143	1.00	14.99
	ATOM	1870	CE	LYS	1070	7.994	15.361	24.554	1.00	15.06
	ATOM	1871	NZ	LYS	1070	6.614	15.692	24.997	1.00	18.74
	ATOM	1872	HZ1	LYS	1070	5.997	14.875	24.804	1.00	0.00
	ATOM	1873	HZ2	LYS	1070	6.278	16.518	24.459	1.00	0.00
20	ATOM	1874	HZ3	LYS	1070	6.592	15.910	26.012	1.00	0.00
	ATOM	1875	C	LYS	1070	12.317	15.847	21.368	1.00	11.97
	ATOM	1876	O	LYS	1070	11.911	16.723	20.599	1.00	15.03
	ATOM	1877	N	TRP	1071	13.503	15.856	21.956	1.00	11.60
	ATOM	1878	H	TRP	1071	13.709	15.096	22.532	1.00	0.00
25	ATOM	1879	CA	TRP	1071	14.550	16.876	21.784	1.00	12.71
	ATOM	1880	CB	TRP	1071	15.008	17.328	23.177	1.00	11.16
	ATOM	1881	CG	TRP	1071	14.061	18.134	23.990	1.00	10.45
	ATOM	1882	CD2	TRP	1071	12.917	17.767	24.809	1.00	10.08
	ATOM	1883	CE2	TRP	1071	12.259	18.985	25.189	1.00	10.86
30	ATOM	1884	CE3	TRP	1071	12.356	16.563	25.274	1.00	8.58
	ATOM	1885	CD1	TRP	1071	14.042	19.528	23.913	1.00	11.85
	ATOM	1886	NE1	TRP	1071	12.970	20.030	24.620	1.00	13.03
	ATOM	1887	HE1	TRP	1071	12.640	20.943	24.532	1.00	0.00
	ATOM	1888	CZ2	TRP	1071	11.094	18.981	25.981	1.00	5.11
35	ATOM	1889	CZ3	TRP	1071	11.190	16.599	26.063	1.00	9.47
	ATOM	1890	CH2	TRP	1071	10.556	17.801	26.411	1.00	6.68
	ATOM	1891	C	TRP	1071	15.743	16.343	21.017	1.00	15.21
	ATOM	1892	O	TRP	1071	16.669	17.101	20.722	1.00	16.96
	ATOM	1893	N	MET	1072	15.769	15.035	20.739	1.00	12.86
40	ATOM	1894	H	MET	1072	14.944	14.507	20.715	1.00	0.00
	ATOM	1895	CA	MET	1072	16.934	14.484	20.049	1.00	13.80
	ATOM	1896	CB	MET	1072	17.097	13.048	20.535	1.00	14.94
	ATOM	1897	CG	MET	1072	17.573	13.061	21.970	1.00	14.27
	ATOM	1898	SD	MET	1072	17.434	11.472	22.783	1.00	17.58
45	ATOM	1899	CE	MET	1072	18.672	10.380	21.891	1.00	14.32
	ATOM	1900	C	MET	1072	16.970	14.508	18.544	1.00	13.02
	ATOM	1901	O	MET	1072	15.992	14.191	17.881	1.00	14.04
	ATOM	1902	N	ALA	1073	18.133	14.833	17.968	1.00	12.71
	ATOM	1903	H	ALA	1073	18.779	15.326	18.507	1.00	0.00
50	ATOM	1904	CA	ALA	1073	18.258	14.804	16.512	1.00	11.73
	ATOM	1905	CB	ALA	1073	19.656	15.355	16.127	1.00	9.43
	ATOM	1906	C	ALA	1073	18.078	13.349	15.977	1.00	12.85
	ATOM	1907	O	ALA	1073	18.489	12.371	16.643	1.00	10.82
	ATOM	1908	N	PRO	1074	17.628	13.102	14.731	1.00	12.68
55	ATOM	1909	CD	PRO	1074	17.374	14.047	13.643	1.00	11.65
	ATOM	1910	CA	PRO	1074	17.572	11.680	14.260	1.00	13.49
	ATOM	1911	CB	PRO	1074	17.054	11.771	12.825	1.00	14.30
	ATOM	1912	CG	PRO	1074	16.586	13.217	12.622	1.00	13.69
	ATOM	1913	C	PRO	1074	18.921	10.926	14.371	1.00	12.98
60	ATOM	1914	O	PRO	1074	18.954	9.748	14.733	1.00	14.35
	ATOM	1915	N	GLU	1075	20.076	11.512	14.037	1.00	12.92
	ATOM	1916	H	GLU	1075	20.026	12.303	13.470	1.00	0.00

	ATOM	1917	CA	GLU	1075	21.348	10.761	14.215	1.00	13.66
	ATOM	1918	CB	GLU	1075	22.591	11.534	13.701	1.00	13.29
	ATOM	1919	CG	GLU	1075	23.015	12.810	14.455	1.00	11.21
	ATOM	1920	CD	GLU	1075	22.234	14.060	14.099	1.00	10.28
5	ATOM	1921	OE1	GLU	1075	21.173	13.988	13.476	1.00	13.07
	ATOM	1922	OE2	GLU	1075	22.672	15.135	14.482	1.00	10.97
	ATOM	1923	C	GLU	1075	21.585	10.430	15.679	1.00	14.82
	ATOM	1924	O	GLU	1075	22.246	9.432	16.026	1.00	16.29
	ATOM	1925	N	THR	1076	21.046	11.232	16.633	1.00	15.92
10	ATOM	1926	H	THR	1076	20.521	12.020	16.389	1.00	0.00
	ATOM	1927	CA	THR	1076	21.253	10.849	18.072	1.00	15.21
	ATOM	1928	CB	THR	1076	21.006	12.043	19.093	1.00	13.64
	ATOM	1929	OG1	THR	1076	21.788	13.186	18.635	1.00	13.03
	ATOM	1930	HG1	THR	1076	22.087	13.683	19.400	1.00	0.00
15	ATOM	1931	CG2	THR	1076	21.496	11.741	20.511	1.00	9.08
	ATOM	1932	C	THR	1076	20.336	9.682	18.425	1.00	14.26
	ATOM	1933	O	THR	1076	20.774	8.708	19.041	1.00	15.48
	ATOM	1934	N	ILE	1077	19.077	9.714	18.029	1.00	13.74
	ATOM	1935	H	ILE	1077	18.728	10.519	17.583	1.00	0.00
20	ATOM	1936	CA	ILE	1077	18.163	8.606	18.337	1.00	13.70
	ATOM	1937	CB	ILE	1077	16.715	8.927	17.836	1.00	14.40
	ATOM	1938	CG2	ILE	1077	15.838	7.653	18.007	1.00	13.38
	ATOM	1939	CG1	ILE	1077	16.060	10.101	18.606	1.00	13.41
	ATOM	1940	CD1	ILE	1077	14.780	10.418	17.804	1.00	10.69
25	ATOM	1941	C	ILE	1077	18.668	7.330	17.618	1.00	14.77
	ATOM	1942	O	ILE	1077	18.819	6.261	18.217	1.00	16.01
	ATOM	1943	N	PHE	1078	18.908	7.424	16.305	1.00	14.97
	ATOM	1944	H	PHE	1078	18.715	8.276	15.875	1.00	0.00
	ATOM	1945	CA	PHE	1078	19.325	6.288	15.487	1.00	16.52
30	ATOM	1946	CB	PHE	1078	18.873	6.586	14.027	1.00	18.97
	ATOM	1947	CG	PHE	1078	17.399	6.742	13.944	1.00	22.87
	ATOM	1948	CD1	PHE	1078	16.813	7.998	13.796	1.00	24.14
	ATOM	1949	CD2	PHE	1078	16.558	5.618	14.057	1.00	25.73
	ATOM	1950	CE1	PHE	1078	15.414	8.134	13.771	1.00	24.81
35	ATOM	1951	CE2	PHE	1078	15.148	5.758	14.027	1.00	25.55
	ATOM	1952	CZ	PHE	1078	14.591	7.023	13.883	1.00	21.74
	ATOM	1953	C	PHE	1078	20.800	5.905	15.542	1.00	17.56
	ATOM	1954	O	PHE	1078	21.177	4.735	15.442	1.00	16.98
	ATOM	1955	N	ASP	1079	21.683	6.865	15.660	1.00	14.61
40	ATOM	1956	H	ASP	1079	21.384	7.790	15.708	1.00	0.00
	ATOM	1957	CA	ASP	1079	23.071	6.433	15.664	1.00	16.88
	ATOM	1958	CB	ASP	1079	23.738	7.032	14.462	1.00	16.01
	ATOM	1959	CG	ASP	1079	22.964	6.674	13.173	1.00	20.95
	ATOM	1960	OD1	ASP	1079	22.252	5.653	13.123	1.00	21.53
45	ATOM	1961	OD2	ASP	1079	23.109	7.443	12.213	1.00	23.80
	ATOM	1962	C	ASP	1079	23.872	6.735	16.915	1.00	18.01
	ATOM	1963	O	ASP	1079	25.084	6.453	16.973	1.00	19.68
	ATOM	1964	N	ARG	1080	23.180	7.195	17.967	1.00	16.85
	ATOM	1965	H	ARG	1080	22.206	7.316	17.874	1.00	0.00
50	ATOM	1966	CA	ARG	1080	23.877	7.532	19.234	1.00	16.62
	ATOM	1967	CB	ARG	1080	24.433	6.241	19.930	1.00	18.49
	ATOM	1968	CG	ARG	1080	23.265	5.327	20.241	1.00	26.09
	ATOM	1969	CD	ARG	1080	23.665	4.127	21.129	1.00	36.59
	ATOM	1970	NE	ARG	1080	24.602	3.227	20.408	1.00	44.61
55	ATOM	1971	HE	ARG	1080	25.049	3.580	19.614	1.00	0.00
	ATOM	1972	CZ	ARG	1080	24.791	1.942	20.750	1.00	46.46
	ATOM	1973	NH1	ARG	1080	25.637	1.188	20.066	1.00	47.71
	ATOM	1974	HH11	ARG	1080	26.140	1.588	19.302	1.00	0.00
	ATOM	1975	HH12	ARG	1080	25.786	0.232	20.322	1.00	0.00
60	ATOM	1976	NH2	ARG	1080	24.123	1.397	21.761	1.00	51.34
	ATOM	1977	HH21	ARG	1080	23.445	1.932	22.265	1.00	0.00
	ATOM	1978	HH22	ARG	1080	24.284	0.441	22.007	1.00	0.00



	ATOM	1979	C	ARG	1080	25.007	8.525	19.013	1.00	13.24
	ATOM	1980	O	ARG	1080	25.958	8.562	19.757	1.00	12.37
	ATOM	1981	N	VAL	1081	24.907	9.325	17.962	1.00	12.79
	ATOM	1982	H	VAL	1081	24.083	9.269	17.417	1.00	0.00
5	ATOM	1983	CA	VAL	1081	25.874	10.372	17.635	1.00	12.63
	ATOM	1984	CB	VAL	1081	25.968	10.510	16.073	1.00	13.26
	ATOM	1985	CG1	VAL	1081	26.648	11.775	15.527	1.00	10.26
	ATOM	1986	CG2	VAL	1081	26.799	9.315	15.662	1.00	11.69
	ATOM	1987	C	VAL	1081	25.420	11.683	18.280	1.00	12.66
10	ATOM	1988	O	VAL	1081	24.316	12.183	18.060	1.00	11.40
	ATOM	1989	N	TYR	1082	26.288	12.308	19.040	1.00	11.87
	ATOM	1990	H	TYR	1082	27.188	11.920	19.082	1.00	0.00
	ATOM	1991	CA	TYR	1082	26.063	13.601	19.756	1.00	11.71
	ATOM	1992	CB	TYR	1082	26.309	13.541	21.287	1.00	11.27
15	ATOM	1993	CG	TYR	1082	25.315	12.691	21.954	1.00	15.85
	ATOM	1994	CD1	TYR	1082	25.377	11.276	21.911	1.00	16.88
	ATOM	1995	CE1	TYR	1082	24.346	10.511	22.499	1.00	17.30
	ATOM	1996	CD2	TYR	1082	24.240	13.343	22.581	1.00	16.48
	ATOM	1997	CE2	TYR	1082	23.222	12.589	23.160	1.00	14.83
20	ATOM	1998	CZ	TYR	1082	23.278	11.197	23.111	1.00	16.91
	ATOM	1999	OH	TYR	1082	22.185	10.525	23.600	1.00	19.99
	ATOM	2000	HH	TYR	1082	22.283	9.580	23.453	1.00	0.00
	ATOM	2001	C	TYR	1082	27.091	14.611	19.260	1.00	13.24
	ATOM	2002	O	TYR	1082	28.296	14.400	19.430	1.00	15.09
25	ATOM	2003	N	THR	1083	26.707	15.712	18.610	1.00	12.75
	ATOM	2004	H	THR	1083	25.759	15.908	18.542	1.00	0.00
	ATOM	2005	CA	THR	1083	27.681	16.752	18.117	1.00	10.58
	ATOM	2006	CB	THR	1083	27.956	16.629	16.576	1.00	10.00
	ATOM	2007	OG1	THR	1083	26.827	17.185	15.954	1.00	12.12
30	ATOM	2008	HG1	THR	1083	26.897	16.948	15.006	1.00	0.00
	ATOM	2009	CG2	THR	1083	28.208	15.168	16.052	1.00	9.41
	ATOM	2010	C	THR	1083	27.033	18.123	18.387	1.00	9.34
	ATOM	2011	O	THR	1083	25.851	18.142	18.723	1.00	12.45
	ATOM	2012	N	ILE	1084	27.677	19.300	18.334	1.00	11.06
35	ATOM	2013	H	ILE	1084	28.656	19.323	18.275	1.00	0.00
	ATOM	2014	CA	ILE	1084	26.889	20.540	18.600	1.00	10.56
	ATOM	2015	CB	ILE	1084	27.555	21.999	18.525	1.00	12.56
	ATOM	2016	CG2	ILE	1084	27.662	22.699	19.946	1.00	10.69
	ATOM	2017	CG1	ILE	1084	28.767	21.818	17.686	1.00	13.36
40	ATOM	2018	CD1	ILE	1084	28.574	21.382	16.218	1.00	11.18
	ATOM	2019	C	ILE	1084	25.849	20.644	17.557	1.00	11.16
	ATOM	2020	O	ILE	1084	24.934	21.418	17.780	1.00	11.43
	ATOM	2021	N	GLN	1085	25.946	19.919	16.401	1.00	12.75
	ATOM	2022	H	GLN	1085	26.743	19.382	16.224	1.00	0.00
45	ATOM	2023	CA	GLN	1085	24.864	20.027	15.398	1.00	12.31
	ATOM	2024	CB	GLN	1085	25.332	19.526	13.973	1.00	13.55
	ATOM	2025	CG	GLN	1085	26.324	20.568	13.359	1.00	11.15
	ATOM	2026	CD	GLN	1085	25.864	22.045	13.386	1.00	8.99
	ATOM	2027	OE1	GLN	1085	26.287	22.855	14.196	1.00	10.88
50	ATOM	2028	NE2	GLN	1085	24.986	22.465	12.499	1.00	8.06
	ATOM	2029	HE21	GLN	1085	24.614	21.886	11.812	1.00	0.00
	ATOM	2030	HE22	GLN	1085	24.725	23.411	12.552	1.00	0.00
	ATOM	2031	C	GLN	1085	23.665	19.271	15.889	1.00	12.53
	ATOM	2032	O	GLN	1085	22.527	19.613	15.561	1.00	14.94
55	ATOM	2033	N	SER	1086	23.853	18.210	16.672	1.00	11.94
	ATOM	2034	H	SER	1086	24.747	17.958	16.970	1.00	0.00
	ATOM	2035	CA	SER	1086	22.631	17.564	17.224	1.00	12.65
	ATOM	2036	CB	SER	1086	22.920	16.111	17.756	1.00	11.86
	ATOM	2037	OG	SER	1086	23.885	16.019	18.783	1.00	13.25
60	ATOM	2038	HG	SER	1086	24.012	15.070	18.951	1.00	0.00
	ATOM	2039	C	SER	1086	22.137	18.524	18.335	1.00	12.90
	ATOM	2040	O	SER	1086	20.930	18.652	18.570	1.00	11.69

	ATOM	2041	N	ASP	1087	23.043	19.250	19.045	1.00	12.13
	ATOM	2042	H	ASP	1087	23.982	18.976	19.028	1.00	0.00
	ATOM	2043	CA	ASP	1087	22.540	20.283	20.013	1.00	10.80
	ATOM	2044	CB	ASP	1087	23.651	21.007	20.814	1.00	12.57
5	ATOM	2045	CG	ASP	1087	24.286	20.205	21.949	1.00	10.95
	ATOM	2046	OD1	ASP	1087	25.324	20.621	22.403	1.00	10.20
	ATOM	2047	OD2	ASP	1087	23.762	19.209	22.413	1.00	13.27
	ATOM	2048	C	ASP	1087	21.796	21.387	19.233	1.00	11.87
	ATOM	2049	O	ASP	1087	20.933	22.063	19.790	1.00	12.59
10	ATOM	2050	N	VAL	1088	22.119	21.676	17.933	1.00	9.83
	ATOM	2051	H	VAL	1088	22.958	21.328	17.562	1.00	0.00
	ATOM	2052	CA	VAL	1088	21.335	22.689	17.151	1.00	9.60
	ATOM	2053	CB	VAL	1088	21.994	23.020	15.747	1.00	8.88
	ATOM	2054	CG1	VAL	1088	20.956	23.738	14.845	1.00	4.87
15	ATOM	2055	CG2	VAL	1088	23.275	23.932	15.982	1.00	5.03
	ATOM	2056	C	VAL	1088	19.917	22.137	16.947	1.00	11.41
	ATOM	2057	O	VAL	1088	18.924	22.867	17.147	1.00	11.23
	ATOM	2058	N	TRP	1089	19.786	20.828	16.621	1.00	10.88
	ATOM	2059	H	TRP	1089	20.582	20.310	16.377	1.00	0.00
20	ATOM	2060	CA	TRP	1089	18.435	20.245	16.505	1.00	11.12
	ATOM	2061	CB	TRP	1089	18.486	18.681	16.227	1.00	11.02
	ATOM	2062	CG	TRP	1089	17.170	17.980	16.077	1.00	8.30
	ATOM	2063	CD2	TRP	1089	16.466	17.518	14.926	1.00	6.33
	ATOM	2064	CE2	TRP	1089	15.175	17.119	15.342	1.00	7.41
25	ATOM	2065	CE3	TRP	1089	16.803	17.397	13.569	1.00	8.47
	ATOM	2066	CD1	TRP	1089	16.238	17.805	17.123	1.00	12.22
	ATOM	2067	NE1	TRP	1089	15.049	17.299	16.690	1.00	8.53
	ATOM	2068	HE1	TRP	1089	14.286	17.020	17.253	1.00	0.00
	ATOM	2069	CZ2	TRP	1089	14.238	16.631	14.445	1.00	5.85
30	ATOM	2070	CZ3	TRP	1089	15.874	16.901	12.659	1.00	9.30
	ATOM	2071	CH2	TRP	1089	14.604	16.530	13.110	1.00	11.51
	ATOM	2072	C	TRP	1089	17.687	20.484	17.846	1.00	12.38
	ATOM	2073	O	TRP	1089	16.548	20.958	17.822	1.00	14.30
	ATOM	2074	N	SER	1090	18.284	20.174	19.025	1.00	10.64
35	ATOM	2075	H	SER	1090	19.139	19.685	18.992	1.00	0.00
	ATOM	2076	CA	SER	1090	17.603	20.377	20.344	1.00	9.63
	ATOM	2077	CB	SER	1090	18.468	19.952	21.562	1.00	7.41
	ATOM	2078	OG	SER	1090	18.882	18.578	21.442	1.00	9.63
	ATOM	2079	HG	SER	1090	18.517	18.113	22.202	1.00	0.00
40	ATOM	2080	C	SER	1090	17.254	21.837	20.547	1.00	10.38
	ATOM	2081	O	SER	1090	16.212	22.170	21.148	1.00	10.77
	ATOM	2082	N	PHE	1091	18.135	22.759	20.081	1.00	9.58
	ATOM	2083	H	PHE	1091	18.984	22.446	19.696	1.00	0.00
	ATOM	2084	CA	PHE	1091	17.859	24.202	20.192	1.00	8.97
45	ATOM	2085	CB	PHE	1091	19.106	24.977	19.703	1.00	7.47
	ATOM	2086	CG	PHE	1091	18.882	26.417	19.842	1.00	9.60
	ATOM	2087	CD1	PHE	1091	18.986	27.042	21.094	1.00	9.17
	ATOM	2088	CD2	PHE	1091	18.551	27.161	18.675	1.00	10.45
	ATOM	2089	CE1	PHE	1091	18.758	28.407	21.165	1.00	7.18
50	ATOM	2090	CE2	PHE	1091	18.326	28.533	18.772	1.00	7.74
	ATOM	2091	CZ	PHE	1091	18.438	29.149	20.030	1.00	7.77
	ATOM	2092	C	PHE	1091	16.592	24.521	19.368	1.00	9.75
	ATOM	2093	O	PHE	1091	15.770	25.352	19.780	1.00	10.24
	ATOM	2094	N	GLY	1092	16.339	23.897	18.202	1.00	9.03
55	ATOM	2095	H	GLY	1092	17.019	23.300	17.823	1.00	0.00
	ATOM	2096	CA	GLY	1092	15.077	24.202	17.450	1.00	6.29
	ATOM	2097	C	GLY	1092	13.879	23.763	18.284	1.00	6.25
	ATOM	2098	O	GLY	1092	12.802	24.356	18.270	1.00	9.11
	ATOM	2099	N	VAL	1093	13.977	22.663	19.009	1.00	7.63
60	ATOM	2100	H	VAL	1093	14.794	22.125	18.950	1.00	0.00
	ATOM	2101	CA	VAL	1093	12.845	22.204	19.873	1.00	10.13
	ATOM	2102	CB	VAL	1093	13.067	20.719	20.459	1.00	11.01

	ATOM	2103	CG1	VAL	1093	11.863	20.352	21.343	1.00	8.45
	ATOM	2104	CG2	VAL	1093	13.263	19.691	19.319	1.00	8.63
	ATOM	2105	C	VAL	1093	12.681	23.204	21.060	1.00	11.32
	ATOM	2106	O	VAL	1093	11.559	23.487	21.474	1.00	14.17
5	ATOM	2107	N	LEU	1094	13.772	23.747	21.627	1.00	9.67
	ATOM	2108	H	LEU	1094	14.635	23.394	21.322	1.00	0.00
	ATOM	2109	CA	LEU	1094	13.742	24.765	22.712	1.00	10.28
	ATOM	2110	CB	LEU	1094	15.255	25.024	23.209	1.00	10.87
	ATOM	2111	CG	LEU	1094	15.700	26.051	24.310	1.00	12.46
10	ATOM	2112	CD1	LEU	1094	15.843	27.424	23.741	1.00	11.93
	ATOM	2113	CD2	LEU	1094	14.599	26.435	25.245	1.00	15.11
	ATOM	2114	C	LEU	1094	13.044	26.000	22.135	1.00	9.48
	ATOM	2115	O	LEU	1094	12.128	26.502	22.771	1.00	10.99
	ATOM	2116	N	LEU	1095	13.350	26.473	20.919	1.00	7.46
15	ATOM	2117	H	LEU	1095	14.104	26.066	20.447	1.00	0.00
	ATOM	2118	CA	LEU	1095	12.633	27.625	20.311	1.00	9.94
	ATOM	2119	CB	LEU	1095	13.046	27.856	18.830	1.00	8.07
	ATOM	2120	CG	LEU	1095	14.478	28.288	18.696	1.00	8.54
	ATOM	2121	CD1	LEU	1095	14.818	28.426	17.233	1.00	6.72
20	ATOM	2122	CD2	LEU	1095	14.692	29.599	19.443	1.00	8.82
	ATOM	2123	C	LEU	1095	11.116	27.333	20.293	1.00	10.78
	ATOM	2124	O	LEU	1095	10.269	28.173	20.649	1.00	10.35
	ATOM	2125	N	TRP	1096	10.744	26.085	19.914	1.00	10.43
	ATOM	2126	H	TRP	1096	11.417	25.461	19.560	1.00	0.00
25	ATOM	2127	CA	TRP	1096	9.322	25.709	19.884	1.00	8.61
	ATOM	2128	CB	TRP	1096	9.118	24.244	19.447	1.00	7.55
	ATOM	2129	CG	TRP	1096	7.661	23.946	19.136	1.00	6.18
	ATOM	2130	CD2	TRP	1096	6.731	23.463	20.055	1.00	6.42
	ATOM	2131	CE2	TRP	1096	5.494	23.275	19.334	1.00	8.76
30	ATOM	2132	CE3	TRP	1096	6.849	23.170	21.430	1.00	8.41
	ATOM	2133	CD1	TRP	1096	6.939	24.040	17.890	1.00	6.35
	ATOM	2134	NE1	TRP	1096	5.640	23.634	18.015	1.00	8.72
	ATOM	2135	HE1	TRP	1096	4.973	23.601	17.286	1.00	0.00
	ATOM	2136	CZ2	TRP	1096	4.392	22.783	20.055	1.00	8.56
35	ATOM	2137	CZ3	TRP	1096	5.751	22.688	22.130	1.00	5.90
	ATOM	2138	CH2	TRP	1096	4.543	22.500	21.446	1.00	8.01
	ATOM	2139	C	TRP	1096	8.729	25.848	21.279	1.00	9.79
	ATOM	2140	O	TRP	1096	7.596	26.252	21.459	1.00	12.59
	ATOM	2141	N	GLU	1097	9.463	25.449	22.314	1.00	9.28
40	ATOM	2142	H	GLU	1097	10.306	25.001	22.090	1.00	0.00
	ATOM	2143	CA	GLU	1097	9.023	25.545	23.700	1.00	8.78
	ATOM	2144	CB	GLU	1097	10.061	24.866	24.651	1.00	8.41
	ATOM	2145	CG	GLU	1097	10.120	23.346	24.435	1.00	6.82
	ATOM	2146	CD	GLU	1097	11.055	22.802	25.470	1.00	7.77
45	ATOM	2147	OE1	GLU	1097	10.602	22.418	26.524	1.00	9.18
	ATOM	2148	OE2	GLU	1097	12.252	22.807	25.273	1.00	10.48
	ATOM	2149	C	GLU	1097	8.847	26.984	24.086	1.00	8.43
	ATOM	2150	O	GLU	1097	7.894	27.359	24.751	1.00	6.16
	ATOM	2151	N	ILE	1098	9.820	27.839	23.734	1.00	11.37
50	ATOM	2152	H	ILE	1098	10.604	27.500	23.266	1.00	0.00
	ATOM	2153	CA	ILE	1098	9.712	29.280	24.036	1.00	8.81
	ATOM	2154	CB	ILE	1098	11.010	29.989	23.612	1.00	6.80
	ATOM	2155	CG2	ILE	1098	10.773	31.508	23.698	1.00	6.09
	ATOM	2156	CG1	ILE	1098	12.152	29.549	24.514	1.00	8.57
55	ATOM	2157	CD1	ILE	1098	13.465	30.147	23.985	1.00	6.22
	ATOM	2158	C	ILE	1098	8.478	29.936	23.346	1.00	8.62
	ATOM	2159	O	ILE	1098	7.685	30.612	24.022	1.00	6.94
	ATOM	2160	N	PHE	1099	8.297	29.730	22.015	1.00	6.87
	ATOM	2161	H	PHE	1099	8.967	29.207	21.530	1.00	0.00
60	ATOM	2162	CA	PHE	1099	7.182	30.328	21.301	1.00	6.82
	ATOM	2163	CB	PHE	1099	7.574	30.540	19.811	1.00	6.09
	ATOM	2164	CG	PHE	1099	8.639	31.568	19.785	1.00	6.80

	ATOM	2165	CD1	PHE	1099	10.010	31.207	19.929	1.00	6.30
	ATOM	2166	CD2	PHE	1099	8.297	32.937	19.682	1.00	8.05
	ATOM	2167	CE1	PHE	1099	11.028	32.170	19.986	1.00	7.24
	ATOM	2168	CE2	PHE	1099	9.329	33.915	19.734	1.00	8.14
5	ATOM	2169	CZ	PHE	1099	10.677	33.534	19.891	1.00	6.46
	ATOM	2170	C	PHE	1099	5.829	29.620	21.415	1.00	8.68
	ATOM	2171	O	PHE	1099	4.861	29.920	20.732	1.00	11.03
	ATOM	2172	N	SER	1100	5.726	28.631	22.276	1.00	10.87
	ATOM	2173	H	SER	1100	6.580	28.265	22.599	1.00	0.00
10	ATOM	2174	CA	SER	1100	4.495	27.899	22.676	1.00	9.16
	ATOM	2175	CB	SER	1100	4.635	26.327	22.565	1.00	8.92
	ATOM	2176	OG	SER	1100	5.586	25.870	23.533	1.00	11.04
	ATOM	2177	HG	SER	1100	5.920	24.995	23.293	1.00	0.00
	ATOM	2178	C	SER	1100	4.261	28.232	24.173	1.00	9.51
15	ATOM	2179	O	SER	1100	3.289	27.773	24.757	1.00	10.70
	ATOM	2180	N	LEU	1101	5.077	29.127	24.789	1.00	9.56
	ATOM	2181	H	LEU	1101	5.744	29.557	24.218	1.00	0.00
	ATOM	2182	CA	LEU	1101	5.086	29.543	26.191	1.00	8.07
	ATOM	2183	CB	LEU	1101	3.916	30.481	26.532	1.00	8.04
20	ATOM	2184	CG	LEU	1101	3.982	31.895	25.920	1.00	8.66
	ATOM	2185	CD1	LEU	1101	2.834	32.782	26.539	1.00	6.34
	ATOM	2186	CD2	LEU	1101	5.327	32.586	26.269	1.00	7.60
	ATOM	2187	C	LEU	1101	5.067	28.346	27.100	1.00	9.80
	ATOM	2188	O	LEU	1101	4.172	28.005	27.845	1.00	9.48
25	ATOM	2189	N	GLY	1102	6.129	27.603	26.998	1.00	11.45
	ATOM	2190	H	GLY	1102	6.780	27.818	26.300	1.00	0.00
	ATOM	2191	CA	GLY	1102	6.378	26.409	27.794	1.00	11.15
	ATOM	2192	C	GLY	1102	5.528	25.197	27.516	1.00	12.16
	ATOM	2193	O	GLY	1102	5.348	24.410	28.437	1.00	9.75
30	ATOM	2194	N	ALA	1103	4.949	25.009	26.319	1.00	12.27
	ATOM	2195	H	ALA	1103	5.127	25.657	25.604	1.00	0.00
	ATOM	2196	CA	ALA	1103	4.143	23.796	26.066	1.00	10.85
	ATOM	2197	CB	ALA	1103	3.277	23.884	24.815	1.00	10.06
	ATOM	2198	C	ALA	1103	5.024	22.580	25.839	1.00	13.18
35	ATOM	2199	O	ALA	1103	6.220	22.707	25.565	1.00	13.47
	ATOM	2200	N	SER	1104	4.467	21.373	25.983	1.00	11.96
	ATOM	2201	H	SER	1104	3.501	21.357	26.148	1.00	0.00
	ATOM	2202	CA	SER	1104	5.204	20.090	25.772	1.00	11.74
	ATOM	2203	CB	SER	1104	4.404	18.884	26.408	1.00	12.12
40	ATOM	2204	OG	SER	1104	5.227	17.708	26.447	1.00	14.42
	ATOM	2205	HG	SER	1104	4.649	16.936	26.552	1.00	0.00
	ATOM	2206	C	SER	1104	5.395	19.791	24.283	1.00	11.24
	ATOM	2207	O	SER	1104	4.414	19.744	23.506	1.00	11.36
	ATOM	2208	N	PRO	1105	6.635	19.545	23.827	1.00	10.59
45	ATOM	2209	CD	PRO	1105	7.884	19.578	24.580	1.00	7.60
	ATOM	2210	CA	PRO	1105	6.827	19.264	22.383	1.00	9.91
	ATOM	2211	CB	PRO	1105	8.339	19.028	22.279	1.00	11.10
	ATOM	2212	CG	PRO	1105	8.855	19.869	23.442	1.00	9.71
	ATOM	2213	C	PRO	1105	5.968	18.113	21.810	1.00	11.75
50	ATOM	2214	O	PRO	1105	5.536	17.204	22.516	1.00	12.95
	ATOM	2215	N	TYR	1106	5.698	18.067	20.504	1.00	11.82
	ATOM	2216	H	TYR	1106	6.057	18.807	19.984	1.00	0.00
	ATOM	2217	CA	TYR	1106	4.864	17.022	19.803	1.00	12.44
	ATOM	2218	CB	TYR	1106	5.602	15.643	19.666	1.00	11.08
55	ATOM	2219	CG	TYR	1106	6.821	15.859	18.861	1.00	11.02
	ATOM	2220	CD1	TYR	1106	8.028	16.078	19.516	1.00	9.52
	ATOM	2221	CE1	TYR	1106	9.171	16.334	18.773	1.00	9.20
	ATOM	2222	CD2	TYR	1106	6.748	15.885	17.459	1.00	11.79
	ATOM	2223	CE2	TYR	1106	7.904	16.144	16.712	1.00	8.37
60	ATOM	2224	CZ	TYR	1106	9.111	16.374	17.371	1.00	9.25
	ATOM	2225	OH	TYR	1106	10.258	16.708	16.623	1.00	12.44
	ATOM	2226	HH	TYR	1106	10.298	16.112	15.857	1.00	0.00

	ATOM	2227	C	TYR	1106	3.522	16.768	20.488	1.00	14.39
	ATOM	2228	O	TYR	1106	3.207	15.656	20.921	1.00	13.26
	ATOM	2229	N	PRO	1107	2.665	17.818	20.616	1.00	16.19
	ATOM	2230	CD	PRO	1107	2.787	19.216	20.101	1.00	14.47
5	ATOM	2231	CA	PRO	1107	1.373	17.604	21.290	1.00	16.73
	ATOM	2232	CB	PRO	1107	0.665	18.932	21.132	1.00	14.38
	ATOM	2233	CG	PRO	1107	1.312	19.624	19.930	1.00	13.95
	ATOM	2234	C	PRO	1107	0.578	16.426	20.691	1.00	19.50
	ATOM	2235	O	PRO	1107	0.501	16.260	19.475	1.00	19.62
10	ATOM	2236	N	GLY	1108	-0.046	15.573	21.483	1.00	23.51
	ATOM	2237	H	GLY	1108	0.031	15.669	22.452	1.00	0.00
	ATOM	2238	CA	GLY	1108	-0.842	14.440	20.894	1.00	29.10
	ATOM	2239	C	GLY	1108	-0.102	13.160	20.438	1.00	31.85
	ATOM	2240	O	GLY	1108	-0.678	12.081	20.383	1.00	37.36
15	ATOM	2241	N	VAL	1109	1.183	13.236	20.110	1.00	32.04
	ATOM	2242	H	VAL	1109	1.586	14.131	20.143	1.00	0.00
	ATOM	2243	CA	VAL	1109	1.969	12.095	19.644	1.00	28.31
	ATOM	2244	CB	VAL	1109	3.155	12.659	18.850	1.00	28.43
	ATOM	2245	CG1	VAL	1109	3.876	11.519	18.123	1.00	30.74
20	ATOM	2246	CG2	VAL	1109	2.679	13.646	17.780	1.00	25.68
	ATOM	2247	C	VAL	1109	2.467	11.153	20.716	1.00	28.13
	ATOM	2248	O	VAL	1109	2.965	11.598	21.741	1.00	27.78
	ATOM	2249	N	LYS	1110	2.259	9.824	20.607	1.00	28.37
	ATOM	2250	H	LYS	1110	1.682	9.508	19.885	1.00	0.00
25	ATOM	2251	CA	LYS	1110	2.867	8.874	21.614	1.00	26.23
	ATOM	2252	CB	LYS	1110	2.287	7.395	21.594	1.00	25.42
	ATOM	2253	C	LYS	1110	4.329	8.771	21.145	1.00	25.25
	ATOM	2254	O	LYS	1110	4.556	8.664	19.924	1.00	26.31
	ATOM	2255	N	ILE	1111	5.333	8.870	22.017	1.00	24.38
30	ATOM	2256	H	ILE	1111	5.095	8.999	22.962	1.00	0.00
	ATOM	2257	CA	ILE	1111	6.765	8.789	21.606	1.00	25.28
	ATOM	2258	CB	ILE	1111	7.512	9.665	22.621	1.00	22.13
	ATOM	2259	CG2	ILE	1111	9.045	9.559	22.420	1.00	21.70
	ATOM	2260	CG1	ILE	1111	6.927	11.139	22.483	1.00	21.23
35	ATOM	2261	CD1	ILE	1111	6.818	11.920	21.179	1.00	13.98
	ATOM	2262	C	ILE	1111	7.236	7.325	21.514	1.00	27.88
	ATOM	2263	O	ILE	1111	7.717	6.680	22.451	1.00	29.94
	ATOM	2264	N	ASP	1112	6.945	6.785	20.326	1.00	30.41
	ATOM	2265	H	ASP	1112	6.439	7.385	19.741	1.00	0.00
40	ATOM	2266	CA	ASP	1112	7.155	5.384	19.884	1.00	31.17
	ATOM	2267	CB	ASP	1112	5.740	4.754	19.553	1.00	34.06
	ATOM	2268	CG	ASP	1112	4.881	5.381	18.414	1.00	38.82
	ATOM	2269	OD1	ASP	1112	3.805	4.851	18.109	1.00	43.82
	ATOM	2270	OD2	ASP	1112	5.213	6.410	17.836	1.00	41.73
45	ATOM	2271	C	ASP	1112	8.059	5.172	18.706	1.00	31.49
	ATOM	2272	O	ASP	1112	8.722	6.065	18.211	1.00	30.29
	ATOM	2273	N	GLU	1113	8.070	3.949	18.179	1.00	33.84
	ATOM	2274	H	GLU	1113	7.587	3.251	18.662	1.00	0.00
	ATOM	2275	CA	GLU	1113	8.880	3.576	16.977	1.00	35.18
50	ATOM	2276	CB	GLU	1113	8.775	2.056	16.628	1.00	36.26
	ATOM	2277	C	GLU	1113	8.358	4.348	15.766	1.00	35.54
	ATOM	2278	O	GLU	1113	9.078	4.776	14.856	1.00	36.48
	ATOM	2279	N	GLU	1114	7.040	4.516	15.722	1.00	35.87
	ATOM	2280	H	GLU	1114	6.482	4.002	16.336	1.00	0.00
55	ATOM	2281	CA	GLU	1114	6.411	5.292	14.640	1.00	35.41
	ATOM	2282	CB	GLU	1114	4.875	5.213	14.747	1.00	41.38
	ATOM	2283	CG	GLU	1114	4.458	3.776	14.388	1.00	51.35
	ATOM	2284	CD	GLU	1114	4.909	3.458	12.944	1.00	56.44
	ATOM	2285	OE1	GLU	1114	6.030	2.921	12.757	1.00	58.09
60	ATOM	2286	OE2	GLU	1114	4.111	3.764	12.034	1.00	59.11
	ATOM	2287	C	GLU	1114	6.841	6.721	14.702	1.00	30.75
	ATOM	2288	O	GLU	1114	7.162	7.328	13.696	1.00	30.84

	ATOM	2289	N	PHE	1115	6.902	7.245	15.910	1.00	26.70
	ATOM	2290	H	PHE	1115	6.809	6.649	16.672	1.00	0.00
	ATOM	2291	CA	PHE	1115	7.304	8.638	16.117	1.00	24.75
	ATOM	2292	CB	PHE	1115	7.287	8.903	17.626	1.00	21.06
5	ATOM	2293	CG	PHE	1115	8.057	10.107	17.885	1.00	20.16
	ATOM	2294	CD1	PHE	1115	9.337	9.975	18.448	1.00	17.72
	ATOM	2295	CD2	PHE	1115	7.529	11.357	17.526	1.00	18.90
	ATOM	2296	CE1	PHE	1115	10.114	11.122	18.651	1.00	20.23
	ATOM	2297	CE2	PHE	1115	8.310	12.504	17.728	1.00	17.75
10	ATOM	2298	CZ	PHE	1115	9.604	12.398	18.286	1.00	18.88
	ATOM	2299	C	PHE	1115	8.687	8.809	15.488	1.00	24.04
	ATOM	2300	O	PHE	1115	8.923	9.656	14.619	1.00	20.53
	ATOM	2301	N	CYS	1116	9.606	7.917	15.882	1.00	24.94
	ATOM	2302	H	CYS	1116	9.387	7.294	16.606	1.00	0.00
15	ATOM	2303	CA	CYS	1116	10.978	7.952	15.320	1.00	25.77
	ATOM	2304	CB	CYS	1116	11.873	6.944	16.088	1.00	25.14
	ATOM	2305	SG	CYS	1116	12.087	7.227	17.838	1.00	25.53
	ATOM	2306	C	CYS	1116	11.009	7.649	13.792	1.00	24.95
	ATOM	2307	O	CYS	1116	11.791	8.236	13.049	1.00	26.91
20	ATOM	2308	N	ARG	1117	10.185	6.781	13.254	1.00	24.68
	ATOM	2309	H	ARG	1117	9.548	6.312	13.825	1.00	0.00
	ATOM	2310	CA	ARG	1117	10.211	6.523	11.814	1.00	27.82
	ATOM	2311	CB	ARG	1117	9.284	5.303	11.534	1.00	32.56
	ATOM	2312	CG	ARG	1117	8.647	5.271	10.120	1.00	39.42
25	ATOM	2313	CD	ARG	1117	7.118	4.958	10.146	1.00	42.88
	ATOM	2314	NE	ARG	1117	6.350	5.670	9.094	1.00	47.03
	ATOM	2315	HE	ARG	1117	6.715	5.743	8.188	1.00	0.00
	ATOM	2316	CZ	ARG	1117	5.116	6.172	9.331	1.00	50.95
	ATOM	2317	NH1	ARG	1117	4.442	6.821	8.365	1.00	52.81
30	ATOM	2318	HH11	ARG	1117	4.836	6.940	7.454	1.00	0.00
	ATOM	2319	HH12	ARG	1117	3.534	7.180	8.581	1.00	0.00
	ATOM	2320	NH2	ARG	1117	4.510	6.035	10.527	1.00	53.03
	ATOM	2321	HH21	ARG	1117	4.979	5.551	11.268	1.00	0.00
	ATOM	2322	HH22	ARG	1117	3.598	6.414	10.688	1.00	0.00
35	ATOM	2323	C	ARG	1117	9.752	7.781	11.102	1.00	27.54
	ATOM	2324	O	ARG	1117	10.414	8.317	10.215	1.00	28.29
	ATOM	2325	N	ARG	1118	8.625	8.347	11.512	1.00	26.52
	ATOM	2326	H	ARG	1118	8.114	7.886	12.202	1.00	0.00
	ATOM	2327	CA	ARG	1118	8.090	9.586	10.903	1.00	25.89
40	ATOM	2328	CB	ARG	1118	6.765	9.875	11.584	1.00	28.99
	ATOM	2329	CG	ARG	1118	5.572	9.143	10.923	1.00	35.90
	ATOM	2330	CD	ARG	1118	4.192	9.237	11.655	1.00	43.45
	ATOM	2331	NE	ARG	1118	4.266	10.246	12.743	1.00	51.43
	ATOM	2332	HE	ARG	1118	4.243	11.186	12.471	1.00	0.00
45	ATOM	2333	CZ	ARG	1118	4.328	9.999	14.092	1.00	54.13
	ATOM	2334	NH1	ARG	1118	4.411	11.067	14.881	1.00	56.25
	ATOM	2335	HH11	ARG	1118	4.413	11.980	14.474	1.00	0.00
	ATOM	2336	HH12	ARG	1118	4.457	10.953	15.873	1.00	0.00
	ATOM	2337	NH2	ARG	1118	4.253	8.791	14.696	1.00	54.29
50	ATOM	2338	HH21	ARG	1118	4.146	7.957	14.155	1.00	0.00
	ATOM	2339	HH22	ARG	1118	4.307	8.729	15.695	1.00	0.00
	ATOM	2340	C	ARG	1118	9.060	10.768	11.021	1.00	24.33
	ATOM	2341	O	ARG	1118	9.215	11.621	10.140	1.00	21.65
	ATOM	2342	N	LEU	1119	9.769	10.844	12.135	1.00	24.38
55	ATOM	2343	H	LEU	1119	9.596	10.185	12.842	1.00	0.00
	ATOM	2344	CA	LEU	1119	10.776	11.922	12.319	1.00	26.92
	ATOM	2345	CB	LEU	1119	11.499	11.793	13.659	1.00	26.37
	ATOM	2346	CG	LEU	1119	12.313	13.052	13.880	1.00	28.47
	ATOM	2347	CD1	LEU	1119	11.292	14.237	14.111	1.00	28.65
60	ATOM	2348	CD2	LEU	1119	13.418	12.730	14.903	1.00	28.41
	ATOM	2349	C	LEU	1119	11.855	11.783	11.225	1.00	28.63
	ATOM	2350	O	LEU	1119	12.303	12.711	10.540	1.00	26.53

	ATOM	2351	N	LYS	1120	12.321	10.537	11.070	1.00	32.80
	ATOM	2352	H	LYS	1120	11.984	9.828	11.660	1.00	0.00
	ATOM	2353	CA	LYS	1120	13.334	10.205	10.042	1.00	35.41
	ATOM	2354	CB	LYS	1120	13.731	8.702	10.216	1.00	37.92
5	ATOM	2355	CG	LYS	1120	15.171	8.623	9.686	1.00	42.81
	ATOM	2356	CD	LYS	1120	15.943	7.327	9.980	1.00	46.89
	ATOM	2357	CE	LYS	1120	17.453	7.567	9.673	1.00	49.85
	ATOM	2358	NZ	LYS	1120	18.322	6.519	10.248	1.00	50.53
	ATOM	2359	HZ1	LYS	1120	18.005	5.592	9.897	1.00	0.00
10	ATOM	2360	HZ2	LYS	1120	18.232	6.537	11.285	1.00	0.00
	ATOM	2361	HZ3	LYS	1120	19.313	6.677	9.980	1.00	0.00
	ATOM	2362	C	LYS	1120	12.804	10.520	8.604	1.00	34.31
	ATOM	2363	O	LYS	1120	13.549	10.962	7.726	1.00	34.06
	ATOM	2364	N	GLU	1121	11.519	10.335	8.307	1.00	33.69
15	ATOM	2365	H	GLU	1121	10.934	9.950	8.992	1.00	0.00
	ATOM	2366	CA	GLU	1121	11.006	10.691	6.954	1.00	34.42
	ATOM	2367	CB	GLU	1121	9.717	9.963	6.615	1.00	39.02
	ATOM	2368	CG	GLU	1121	9.355	8.690	7.363	1.00	44.84
	ATOM	2369	CD	GLU	1121	7.879	8.376	7.095	1.00	50.33
20	ATOM	2370	OE1	GLU	1121	7.001	9.257	7.243	1.00	52.50
	ATOM	2371	OE2	GLU	1121	7.637	7.216	6.746	1.00	53.15
	ATOM	2372	C	GLU	1121	10.683	12.189	6.721	1.00	31.43
	ATOM	2373	O	GLU	1121	10.164	12.554	5.673	1.00	32.37
	ATOM	2374	N	GLY	1122	10.901	13.115	7.670	1.00	30.06
25	ATOM	2375	H	GLY	1122	11.281	12.828	8.528	1.00	0.00
	ATOM	2376	CA	GLY	1122	10.589	14.551	7.428	1.00	25.25
	ATOM	2377	C	GLY	1122	9.477	15.135	8.317	1.00	24.23
	ATOM	2378	O	GLY	1122	9.157	16.314	8.213	1.00	23.78
	ATOM	2379	N	THR	1123	8.799	14.353	9.162	1.00	23.61
30	ATOM	2380	H	THR	1123	8.979	13.388	9.187	1.00	0.00
	ATOM	2381	CA	THR	1123	7.766	14.947	10.033	1.00	22.23
	ATOM	2382	CB	THR	1123	6.974	13.900	10.800	1.00	26.33
	ATOM	2383	OG1	THR	1123	6.414	12.996	9.845	1.00	29.98
	ATOM	2384	HG1	THR	1123	5.988	12.287	10.334	1.00	0.00
35	ATOM	2385	CG2	THR	1123	5.802	14.510	11.618	1.00	27.93
	ATOM	2386	C	THR	1123	8.372	15.870	11.083	1.00	20.93
	ATOM	2387	O	THR	1123	9.245	15.496	11.882	1.00	20.53
	ATOM	2388	N	ARG	1124	7.804	17.081	11.125	1.00	18.85
	ATOM	2389	H	ARG	1124	7.091	17.224	10.463	1.00	0.00
40	ATOM	2390	CA	ARG	1124	8.208	18.177	12.015	1.00	16.91
	ATOM	2391	CB	ARG	1124	8.866	19.297	11.205	1.00	13.51
	ATOM	2392	CG	ARG	1124	10.111	18.857	10.438	1.00	12.60
	ATOM	2393	CD	ARG	1124	11.153	18.234	11.408	1.00	13.51
	ATOM	2394	NE	ARG	1124	12.359	17.884	10.659	1.00	14.82
45	ATOM	2395	HE	ARG	1124	12.937	18.607	10.337	1.00	0.00
	ATOM	2396	CZ	ARG	1124	12.679	16.636	10.339	1.00	13.97
	ATOM	2397	NH1	ARG	1124	11.903	15.614	10.685	1.00	15.09
	ATOM	2398	HH11	ARG	1124	11.062	15.778	11.193	1.00	0.00
	ATOM	2399	HH12	ARG	1124	12.157	14.680	10.427	1.00	0.00
50	ATOM	2400	NH2	ARG	1124	13.830	16.422	9.696	1.00	12.22
	ATOM	2401	HH21	ARG	1124	14.418	17.197	9.450	1.00	0.00
	ATOM	2402	HH22	ARG	1124	14.099	15.489	9.450	1.00	0.00
	ATOM	2403	C	ARG	1124	7.018	18.769	12.732	1.00	17.72
	ATOM	2404	O	ARG	1124	5.877	18.634	12.327	1.00	18.48
55	ATOM	2405	N	MET	1125	7.203	19.426	13.869	1.00	17.44
	ATOM	2406	H	MET	1125	8.086	19.748	14.121	1.00	0.00
	ATOM	2407	CA	MET	1125	6.082	20.058	14.545	1.00	14.08
	ATOM	2408	CB	MET	1125	6.458	20.646	15.955	1.00	11.92
	ATOM	2409	CG	MET	1125	6.715	19.548	16.931	1.00	6.55
60	ATOM	2410	SD	MET	1125	6.981	20.313	18.505	1.00	10.93
	ATOM	2411	CE	MET	1125	8.781	20.363	18.497	1.00	6.60
	ATOM	2412	C	MET	1125	5.590	21.244	13.756	1.00	14.73

	ATOM	2413	O	MET	1125	6.306	21.868	12.977	1.00	12.91
	ATOM	2414	N	ARG	1126	4.311	21.498	13.970	1.00	18.11
	ATOM	2415	H	ARG	1126	3.810	20.759	14.355	1.00	0.00
	ATOM	2416	CA	ARG	1126	3.575	22.672	13.433	1.00	21.46
5	ATOM	2417	CB	ARG	1126	2.009	22.609	13.666	1.00	27.99
	ATOM	2418	CG	ARG	1126	1.748	22.490	15.282	1.00	39.67
	ATOM	2419	CD	ARG	1126	1.082	23.598	16.246	1.00	44.30
	ATOM	2420	NE	ARG	1126	1.406	23.465	17.724	1.00	45.26
	ATOM	2421	HE	ARG	1126	2.197	22.939	17.964	1.00	0.00
10	ATOM	2422	CZ	ARG	1126	0.693	24.111	18.739	1.00	48.13
	ATOM	2423	NH1	ARG	1126	1.046	23.944	20.032	1.00	40.37
	ATOM	2424	HH11	ARG	1126	1.828	23.365	20.256	1.00	0.00
	ATOM	2425	HH12	ARG	1126	0.525	24.403	20.750	1.00	0.00
	ATOM	2426	NH2	ARG	1126	-0.399	24.908	18.502	1.00	47.73
15	ATOM	2427	HH21	ARG	1126	-0.725	25.062	17.566	1.00	0.00
	ATOM	2428	HH22	ARG	1126	-0.880	25.345	19.263	1.00	0.00
	ATOM	2429	C	ARG	1126	4.078	23.876	14.272	1.00	18.73
	ATOM	2430	O	ARG	1126	4.569	23.765	15.415	1.00	16.59
	ATOM	2431	N	ALA	1127	3.756	25.044	13.748	1.00	16.28
20	ATOM	2432	H	ALA	1127	3.261	25.016	12.909	1.00	0.00
	ATOM	2433	CA	ALA	1127	4.114	26.305	14.352	1.00	15.65
	ATOM	2434	CB	ALA	1127	3.634	27.460	13.464	1.00	14.55
	ATOM	2435	C	ALA	1127	3.501	26.469	15.701	1.00	16.26
	ATOM	2436	O	ALA	1127	2.282	26.263	15.831	1.00	18.84
25	ATOM	2437	N	PRO	1128	4.252	26.895	16.708	1.00	14.96
	ATOM	2438	CD	PRO	1128	5.715	27.060	16.794	1.00	12.66
	ATOM	2439	CA	PRO	1128	3.593	27.109	18.019	1.00	14.67
	ATOM	2440	CB	PRO	1128	4.808	27.180	18.976	1.00	15.68
	ATOM	2441	CG	PRO	1128	5.849	27.877	18.090	1.00	11.30
30	ATOM	2442	C	PRO	1128	2.683	28.350	18.036	1.00	13.94
	ATOM	2443	O	PRO	1128	2.848	29.271	17.226	1.00	14.43
	ATOM	2444	N	ASP	1129	1.822	28.527	19.022	1.00	12.40
	ATOM	2445	H	ASP	1129	1.739	27.820	19.688	1.00	0.00
	ATOM	2446	CA	ASP	1129	0.917	29.693	19.027	1.00	13.83
35	ATOM	2447	CB	ASP	1129	-0.066	29.623	20.196	1.00	11.72
	ATOM	2448	CG	ASP	1129	-0.997	28.410	20.124	1.00	15.51
	ATOM	2449	OD1	ASP	1129	-1.572	28.083	21.172	1.00	15.59
	ATOM	2450	OD2	ASP	1129	-1.170	27.800	19.062	1.00	13.79
	ATOM	2451	C	ASP	1129	1.462	31.104	19.050	1.00	13.47
40	ATOM	2452	O	ASP	1129	0.829	32.019	18.529	1.00	12.94
	ATOM	2453	N	TYR	1130	2.624	31.334	19.632	1.00	11.61
	ATOM	2454	H	TYR	1130	3.150	30.591	19.999	1.00	0.00
	ATOM	2455	CA	TYR	1130	3.116	32.708	19.742	1.00	10.83
	ATOM	2456	CB	TYR	1130	3.551	32.896	21.258	1.00	7.34
45	ATOM	2457	CG	TYR	1130	2.491	32.424	22.193	1.00	11.05
	ATOM	2458	CD1	TYR	1130	2.536	31.128	22.766	1.00	10.80
	ATOM	2459	CE1	TYR	1130	1.486	30.661	23.592	1.00	10.57
	ATOM	2460	CD2	TYR	1130	1.377	33.250	22.457	1.00	10.25
	ATOM	2461	CE2	TYR	1130	0.333	32.812	23.270	1.00	13.26
50	ATOM	2462	CZ	TYR	1130	0.374	31.511	23.845	1.00	14.32
	ATOM	2463	OH	TYR	1130	-0.718	31.073	24.630	1.00	16.33
	ATOM	2464	HH	TYR	1130	-0.370	30.436	25.263	1.00	0.00
	ATOM	2465	C	TYR	1130	4.249	33.022	18.776	1.00	11.87
	ATOM	2466	O	TYR	1130	4.990	34.000	18.928	1.00	11.86
55	ATOM	2467	N	THR	1131	4.476	32.146	17.811	1.00	12.72
	ATOM	2468	H	THR	1131	3.843	31.420	17.653	1.00	0.00
	ATOM	2469	CA	THR	1131	5.646	32.365	16.935	1.00	13.59
	ATOM	2470	CB	THR	1131	6.072	31.014	16.195	1.00	13.38
	ATOM	2471	OG1	THR	1131	7.360	31.276	15.706	1.00	13.01
60	ATOM	2472	HG1	THR	1131	7.667	30.528	15.188	1.00	0.00
	ATOM	2473	CG2	THR	1131	5.273	30.564	14.946	1.00	8.91
	ATOM	2474	C	THR	1131	5.548	33.452	15.870	1.00	16.94



	ATOM	2475	O	THR	1131	4.459	33.971	15.603	1.00	16.59
	ATOM	2476	N	THR	1132	6.696	33.866	15.333	1.00	16.17
	ATOM	2477	H	THR	1132	7.527	33.431	15.621	1.00	0.00
	ATOM	2478	CA	THR	1132	6.688	34.798	14.213	1.00	16.72
5	ATOM	2479	CB	THR	1132	7.794	35.785	14.221	1.00	16.34
	ATOM	2480	OG1	THR	1132	9.013	35.048	14.265	1.00	18.17
	ATOM	2481	HG1	THR	1132	9.723	35.661	14.512	1.00	0.00
	ATOM	2482	CG2	THR	1132	7.608	36.796	15.359	1.00	18.54
	ATOM	2483	C	THR	1132	6.984	33.900	13.034	1.00	18.15
10	ATOM	2484	O	THR	1132	7.596	32.826	13.167	1.00	18.89
	ATOM	2485	N	PRO	1133	6.640	34.312	11.819	1.00	19.89
	ATOM	2486	CD	PRO	1133	5.873	35.542	11.459	1.00	20.39
	ATOM	2487	CA	PRO	1133	6.896	33.444	10.620	1.00	20.71
	ATOM	2488	CB	PRO	1133	6.425	34.300	9.433	1.00	21.56
15	ATOM	2489	CG	PRO	1133	5.308	35.183	10.063	1.00	21.64
	ATOM	2490	C	PRO	1133	8.360	33.024	10.506	1.00	19.03
	ATOM	2491	O	PRO	1133	8.719	31.869	10.229	1.00	16.45
	ATOM	2492	N	GLU	1134	9.240	34.012	10.747	1.00	17.06
	ATOM	2493	H	GLU	1134	8.907	34.913	10.915	1.00	0.00
20	ATOM	2494	CA	GLU	1134	10.686	33.715	10.691	1.00	18.51
	ATOM	2495	CB	GLU	1134	11.534	34.999	10.575	1.00	19.66
	ATOM	2496	CG	GLU	1134	11.114	36.296	11.211	1.00	27.66
	ATOM	2497	CD	GLU	1134	9.863	36.966	10.602	1.00	29.76
	ATOM	2498	OE1	GLU	1134	8.883	37.146	11.310	1.00	31.35
25	ATOM	2499	OE2	GLU	1134	9.868	37.334	9.442	1.00	32.48
	ATOM	2500	C	GLU	1134	11.165	32.881	11.856	1.00	16.49
	ATOM	2501	O	GLU	1134	12.113	32.107	11.658	1.00	14.20
	ATOM	2502	N	MET	1135	10.543	32.986	13.079	1.00	15.23
	ATOM	2503	H	MET	1135	9.809	33.615	13.230	1.00	0.00
30	ATOM	2504	CA	MET	1135	10.989	32.092	14.169	1.00	13.39
	ATOM	2505	CB	MET	1135	10.378	32.352	15.593	1.00	13.65
	ATOM	2506	CG	MET	1135	11.065	33.589	16.185	1.00	21.35
	ATOM	2507	SD	MET	1135	12.898	33.531	16.320	1.00	26.08
	ATOM	2508	CE	MET	1135	13.123	31.946	17.074	1.00	15.74
35	ATOM	2509	C	MET	1135	10.581	30.666	13.764	1.00	11.94
	ATOM	2510	O	MET	1135	11.381	29.750	13.983	1.00	13.63
	ATOM	2511	N	TYR	1136	9.410	30.412	13.178	1.00	8.29
	ATOM	2512	H	TYR	1136	8.783	31.159	13.029	1.00	0.00
	ATOM	2513	CA	TYR	1136	9.100	29.061	12.772	1.00	7.94
40	ATOM	2514	CB	TYR	1136	7.668	29.068	12.317	1.00	9.36
	ATOM	2515	CG	TYR	1136	7.315	27.659	12.113	1.00	10.67
	ATOM	2516	CD1	TYR	1136	7.522	26.642	13.081	1.00	10.95
	ATOM	2517	CE1	TYR	1136	7.179	25.295	12.818	1.00	10.32
	ATOM	2518	CD2	TYR	1136	6.756	27.343	10.873	1.00	10.22
45	ATOM	2519	CE2	TYR	1136	6.419	26.011	10.619	1.00	13.47
	ATOM	2520	CZ	TYR	1136	6.629	25.012	11.574	1.00	9.44
	ATOM	2521	OH	TYR	1136	6.212	23.774	11.217	1.00	11.19
	ATOM	2522	HH	TYR	1136	6.005	23.729	10.279	1.00	0.00
	ATOM	2523	C	TYR	1136	10.069	28.567	11.662	1.00	11.63
50	ATOM	2524	O	TYR	1136	10.560	27.433	11.685	1.00	12.69
	ATOM	2525	N	GLN	1137	10.344	29.337	10.599	1.00	11.62
	ATOM	2526	H	GLN	1137	9.829	30.160	10.482	1.00	0.00
	ATOM	2527	CA	GLN	1137	11.352	28.873	9.620	1.00	11.20
	ATOM	2528	CB	GLN	1137	11.533	29.959	8.554	1.00	11.85
55	ATOM	2529	CG	GLN	1137	12.535	29.476	7.432	1.00	16.41
	ATOM	2530	CD	GLN	1137	12.029	28.200	6.742	1.00	17.63
	ATOM	2531	OE1	GLN	1137	10.914	28.141	6.204	1.00	16.74
	ATOM	2532	NE2	GLN	1137	12.818	27.129	6.768	1.00	14.60
	ATOM	2533	HE21	GLN	1137	13.682	27.153	7.211	1.00	0.00
60	ATOM	2534	HE22	GLN	1137	12.503	26.320	6.325	1.00	0.00
	ATOM	2535	C	GLN	1137	12.742	28.514	10.263	1.00	10.70
	ATOM	2536	O	GLN	1137	13.488	27.655	9.811	1.00	11.23

	ATOM	2537	N	THR	1138	13.160	29.223	11.279	1.00	10.73
	ATOM	2538	H	THR	1138	12.711	30.080	11.430	1.00	0.00
	ATOM	2539	CA	THR	1138	14.423	28.970	11.991	1.00	12.36
	ATOM	2540	CB	THR	1138	14.611	30.172	13.003	1.00	13.87
5	ATOM	2541	OG1	THR	1138	14.798	31.399	12.255	1.00	13.22
	ATOM	2542	HG1	THR	1138	14.185	32.065	12.593	1.00	0.00
	ATOM	2543	CG2	THR	1138	15.837	29.981	13.919	1.00	12.91
	ATOM	2544	C	THR	1138	14.441	27.576	12.685	1.00	13.74
	ATOM	2545	O	THR	1138	15.450	26.864	12.656	1.00	14.41
10	ATOM	2546	N	MET	1139	13.317	27.186	13.327	1.00	12.09
	ATOM	2547	H	MET	1139	12.610	27.867	13.380	1.00	0.00
	ATOM	2548	CA	MET	1139	13.049	25.895	13.999	1.00	9.92
	ATOM	2549	CB	MET	1139	11.598	25.843	14.510	1.00	8.95
	ATOM	2550	CG	MET	1139	11.288	26.816	15.683	1.00	11.71
15	ATOM	2551	SD	MET	1139	9.570	26.789	16.208	1.00	12.42
	ATOM	2552	CE	MET	1139	9.378	28.445	16.808	1.00	6.39
	ATOM	2553	C	MET	1139	13.184	24.868	12.916	1.00	10.48
	ATOM	2554	O	MET	1139	13.939	23.934	12.995	1.00	11.60
	ATOM	2555	N	LEU	1140	12.429	25.015	11.838	1.00	11.61
20	ATOM	2556	H	LEU	1140	11.756	25.730	11.841	1.00	0.00
	ATOM	2557	CA	LEU	1140	12.520	24.102	10.670	1.00	11.52
	ATOM	2558	CB	LEU	1140	11.640	24.629	9.516	1.00	9.13
	ATOM	2559	CG	LEU	1140	10.152	24.631	9.713	1.00	11.56
	ATOM	2560	CD1	LEU	1140	9.505	25.044	8.350	1.00	11.55
25	ATOM	2561	CD2	LEU	1140	9.663	23.234	10.190	1.00	8.44
	ATOM	2562	C	LEU	1140	13.978	24.023	10.170	1.00	12.08
	ATOM	2563	O	LEU	1140	14.449	22.947	9.814	1.00	14.18
	ATOM	2564	N	ASP	1141	14.719	25.140	10.096	1.00	12.35
	ATOM	2565	H	ASP	1141	14.271	25.995	10.248	1.00	0.00
30	ATOM	2566	CA	ASP	1141	16.136	25.136	9.671	1.00	12.11
	ATOM	2567	CB	ASP	1141	16.783	26.574	9.759	1.00	16.14
	ATOM	2568	CG	ASP	1141	16.311	27.576	8.684	1.00	18.95
	ATOM	2569	OD1	ASP	1141	16.555	28.751	8.850	1.00	19.98
	ATOM	2570	OD2	ASP	1141	15.710	27.209	7.681	1.00	21.61
35	ATOM	2571	C	ASP	1141	16.929	24.218	10.567	1.00	12.00
	ATOM	2572	O	ASP	1141	17.741	23.389	10.136	1.00	10.77
	ATOM	2573	N	CYS	1142	16.723	24.405	11.880	1.00	9.89
	ATOM	2574	H	CYS	1142	16.113	25.128	12.146	1.00	0.00
	ATOM	2575	CA	CYS	1142	17.402	23.596	12.931	1.00	9.14
40	ATOM	2576	CB	CYS	1142	17.077	24.052	14.410	1.00	11.06
	ATOM	2577	SG	CYS	1142	17.594	25.770	14.791	1.00	12.04
	ATOM	2578	C	CYS	1142	17.063	22.123	12.884	1.00	10.28
	ATOM	2579	O	CYS	1142	17.819	21.269	13.377	1.00	7.29
	ATOM	2580	N	TRP	1143	15.858	21.826	12.340	1.00	10.05
45	ATOM	2581	H	TRP	1143	15.253	22.558	12.095	1.00	0.00
	ATOM	2582	CA	TRP	1143	15.415	20.431	12.233	1.00	9.86
	ATOM	2583	CB	TRP	1143	13.918	20.422	12.540	1.00	8.26
	ATOM	2584	CG	TRP	1143	13.549	20.873	13.909	1.00	9.79
	ATOM	2585	CD2	TRP	1143	12.289	21.409	14.268	1.00	10.88
50	ATOM	2586	CE2	TRP	1143	12.307	21.612	15.682	1.00	9.03
	ATOM	2587	CE3	TRP	1143	11.125	21.734	13.497	1.00	12.36
	ATOM	2588	CD1	TRP	1143	14.255	20.780	15.127	1.00	10.04
	ATOM	2589	NE1	TRP	1143	13.503	21.225	16.193	1.00	9.01
	ATOM	2590	HE1	TRP	1143	13.751	21.151	17.139	1.00	0.00
55	ATOM	2591	CZ2	TRP	1143	11.158	22.152	16.268	1.00	9.18
	ATOM	2592	CZ3	TRP	1143	9.959	22.272	14.105	1.00	10.47
	ATOM	2593	CH2	TRP	1143	10.008	22.482	15.491	1.00	7.42
	ATOM	2594	C	TRP	1143	15.735	19.788	10.869	1.00	13.41
	ATOM	2595	O	TRP	1143	15.097	18.916	10.282	1.00	13.88
60	ATOM	2596	N	HIS	1144	16.755	20.319	10.244	1.00	14.53
	ATOM	2597	H	HIS	1144	17.160	21.120	10.622	1.00	0.00
	ATOM	2598	CA	HIS	1144	17.233	19.814	8.986	1.00	15.86

	ATOM	2599	C	HIS	1144	17.697	18.375	9.218	1.00	15.88
	ATOM	2600	O	HIS	1144	18.496	18.108	10.118	1.00	16.45
	ATOM	2601	CB	HIS	1144	18.392	20.691	8.566	1.00	20.10
	ATOM	2602	CG	HIS	1144	18.646	20.358	7.199	1.00	22.59
5	ATOM	2603	ND1	HIS	1144	18.033	20.945	6.157	1.00	26.27
	ATOM	2604	HD1	HIS	1144	17.385	21.685	6.214	1.00	0.00
	ATOM	2605	CD2	HIS	1144	19.409	19.301	6.750	1.00	23.42
	ATOM	2606	NE2	HIS	1144	19.259	19.230	5.419	1.00	25.41
	ATOM	2607	CE1	HIS	1144	18.416	20.241	5.031	1.00	24.96
10	ATOM	2608	N	GLY	1145	17.246	17.392	8.413	1.00	16.61
	ATOM	2609	H	GLY	1145	16.441	17.623	7.917	1.00	0.00
	ATOM	2610	CA	GLY	1145	17.676	15.964	8.534	1.00	12.99
	ATOM	2611	C	GLY	1145	19.215	15.875	8.544	1.00	15.09
	ATOM	2612	O	GLY	1145	19.832	15.192	9.344	1.00	16.85
15	ATOM	2613	N	GLU	1146	19.901	16.561	7.641	1.00	15.41
	ATOM	2614	H	GLU	1146	19.360	16.986	6.954	1.00	0.00
	ATOM	2615	CA	GLU	1146	21.365	16.634	7.539	1.00	16.58
	ATOM	2616	CB	GLU	1146	21.604	16.961	6.052	1.00	22.39
	ATOM	2617	CG	GLU	1146	23.035	16.995	5.598	1.00	31.26
20	ATOM	2618	CD	GLU	1146	23.726	15.689	5.954	1.00	38.03
	ATOM	2619	OE1	GLU	1146	23.307	14.626	5.453	1.00	40.59
	ATOM	2620	OE2	GLU	1146	24.692	15.781	6.735	1.00	40.52
	ATOM	2621	C	GLU	1146	22.016	17.629	8.530	1.00	13.41
	ATOM	2622	O	GLU	1146	21.990	18.857	8.381	1.00	12.91
25	ATOM	2623	N	PRO	1147	22.687	17.102	9.549	1.00	12.44
	ATOM	2624	CD	PRO	1147	22.895	15.673	9.777	1.00	11.68
	ATOM	2625	CA	PRO	1147	23.378	17.844	10.592	1.00	14.05
	ATOM	2626	CB	PRO	1147	24.330	16.886	11.334	1.00	12.02
	ATOM	2627	CG	PRO	1147	23.625	15.521	11.125	1.00	11.74
30	ATOM	2628	C	PRO	1147	24.169	18.983	10.049	1.00	17.32
	ATOM	2629	O	PRO	1147	24.142	20.089	10.584	1.00	17.23
	ATOM	2630	N	SER	1148	24.921	18.753	8.955	1.00	18.62
	ATOM	2631	H	SER	1148	24.933	17.867	8.540	1.00	0.00
	ATOM	2632	CA	SER	1148	25.756	19.835	8.389	1.00	17.44
35	ATOM	2633	CB	SER	1148	26.761	19.390	7.332	1.00	18.22
	ATOM	2634	OG	SER	1148	26.042	18.748	6.278	1.00	20.41
	ATOM	2635	HG	SER	1148	26.465	18.973	5.430	1.00	0.00
	ATOM	2636	C	SER	1148	24.958	20.863	7.732	1.00	16.15
	ATOM	2637	O	SER	1148	25.505	21.917	7.491	1.00	18.02
40	ATOM	2638	N	GLN	1149	23.732	20.586	7.357	1.00	15.16
	ATOM	2639	H	GLN	1149	23.418	19.667	7.405	1.00	0.00
	ATOM	2640	CA	GLN	1149	22.891	21.615	6.729	1.00	15.44
	ATOM	2641	CB	GLN	1149	22.006	20.925	5.725	1.00	19.01
	ATOM	2642	CG	GLN	1149	22.759	20.628	4.391	1.00	23.66
45	ATOM	2643	CD	GLN	1149	22.885	21.905	3.528	1.00	29.98
	ATOM	2644	OE1	GLN	1149	21.961	22.400	2.876	1.00	32.54
	ATOM	2645	NE2	GLN	1149	23.993	22.615	3.547	1.00	34.01
	ATOM	2646	HE21	GLN	1149	24.788	22.431	4.066	1.00	0.00
	ATOM	2647	HE22	GLN	1149	23.947	23.404	2.963	1.00	0.00
50	ATOM	2648	C	GLN	1149	22.100	22.442	7.692	1.00	14.66
	ATOM	2649	O	GLN	1149	21.415	23.404	7.337	1.00	12.66
	ATOM	2650	N	ARG	1150	22.050	21.997	8.948	1.00	15.39
	ATOM	2651	H	ARG	1150	22.424	21.122	9.186	1.00	0.00
	ATOM	2652	CA	ARG	1150	21.412	22.849	10.014	1.00	13.76
55	ATOM	2653	CB	ARG	1150	21.304	22.119	11.369	1.00	10.68
	ATOM	2654	CG	ARG	1150	20.487	20.870	11.275	1.00	6.04
	ATOM	2655	CD	ARG	1150	20.662	20.046	12.523	1.00	10.03
	ATOM	2656	NE	ARG	1150	20.063	18.756	12.177	1.00	10.05
	ATOM	2657	HE	ARG	1150	19.274	18.802	11.626	1.00	0.00
60	ATOM	2658	CZ	ARG	1150	20.400	17.611	12.748	1.00	8.82
	ATOM	2659	NH1	ARG	1150	21.302	17.584	13.744	1.00	6.92
	ATOM	2660	HH11	ARG	1150	21.752	18.415	14.063	1.00	0.00

	ATOM	2661	HH12	ARG	1150	21.537	16.706	14.152	1.00	0.00
	ATOM	2662	NH2	ARG	1150	19.901	16.487	12.197	1.00	6.09
	ATOM	2663	HH21	ARG	1150	19.315	16.546	11.389	1.00	0.00
	ATOM	2664	HH22	ARG	1150	20.098	15.588	12.589	1.00	0.00
5	ATOM	2665	C	ARG	1150	22.322	24.089	10.254	1.00	14.35
	ATOM	2666	O	ARG	1150	23.561	24.043	10.068	1.00	13.96
	ATOM	2667	N	PRO	1151	21.790	25.263	10.656	1.00	13.41
	ATOM	2668	CD	PRO	1151	20.359	25.620	10.792	1.00	11.75
	ATOM	2669	CA	PRO	1151	22.716	26.415	10.974	1.00	12.90
10	ATOM	2670	CB	PRO	1151	21.739	27.599	11.290	1.00	10.89
	ATOM	2671	CG	PRO	1151	20.400	26.930	11.646	1.00	11.67
	ATOM	2672	C	PRO	1151	23.751	26.187	12.108	1.00	12.85
	ATOM	2673	O	PRO	1151	23.560	25.278	12.926	1.00	13.40
	ATOM	2674	N	THR	1152	24.878	26.902	12.163	1.00	11.15
15	ATOM	2675	H	THR	1152	25.145	27.467	11.423	1.00	0.00
	ATOM	2676	CA	THR	1152	25.760	26.698	13.337	1.00	10.98
	ATOM	2677	CB	THR	1152	27.158	27.134	13.118	1.00	9.87
	ATOM	2678	OG1	THR	1152	27.151	28.487	12.760	1.00	10.78
	ATOM	2679	HG1	THR	1152	28.078	28.726	12.644	1.00	0.00
20	ATOM	2680	CG2	THR	1152	27.781	26.346	11.993	1.00	10.21
	ATOM	2681	C	THR	1152	25.279	27.584	14.476	1.00	9.16
	ATOM	2682	O	THR	1152	24.421	28.422	14.208	1.00	11.34
	ATOM	2683	N	PHE	1153	25.660	27.427	15.735	1.00	7.56
	ATOM	2684	H	PHE	1153	26.125	26.604	15.993	1.00	0.00
25	ATOM	2685	CA	PHE	1153	25.211	28.389	16.789	1.00	9.10
	ATOM	2686	CB	PHE	1153	25.729	27.970	18.239	1.00	9.77
	ATOM	2687	CG	PHE	1153	24.739	26.964	18.782	1.00	10.94
	ATOM	2688	CD1	PHE	1153	23.381	27.326	19.022	1.00	9.31
	ATOM	2689	CD2	PHE	1153	25.132	25.594	18.950	1.00	9.88
30	ATOM	2690	CE1	PHE	1153	22.446	26.358	19.396	1.00	9.59
	ATOM	2691	CE2	PHE	1153	24.188	24.624	19.324	1.00	8.24
	ATOM	2692	CZ	PHE	1153	22.851	25.010	19.541	1.00	10.74
	ATOM	2693	C	PHE	1153	25.680	29.827	16.460	1.00	11.29
	ATOM	2694	O	PHE	1153	25.000	30.838	16.730	1.00	11.98
35	ATOM	2695	N	SER	1154	26.829	29.997	15.790	1.00	12.07
	ATOM	2696	H	SER	1154	27.451	29.243	15.798	1.00	0.00
	ATOM	2697	CA	SER	1154	27.257	31.382	15.383	1.00	12.79
	ATOM	2698	CB	SER	1154	28.657	31.431	14.773	1.00	12.05
	ATOM	2699	OG	SER	1154	29.552	30.999	15.767	1.00	12.43
40	ATOM	2700	HG	SER	1154	30.424	31.394	15.623	1.00	0.00
	ATOM	2701	C	SER	1154	26.338	32.022	14.359	1.00	12.24
	ATOM	2702	O	SER	1154	26.162	33.254	14.338	1.00	11.73
	ATOM	2703	N	GLU	1155	25.844	31.234	13.394	1.00	11.38
	ATOM	2704	H	GLU	1155	26.062	30.278	13.405	1.00	0.00
45	ATOM	2705	CA	GLU	1155	24.869	31.760	12.387	1.00	13.34
	ATOM	2706	CB	GLU	1155	24.658	30.709	11.297	1.00	14.17
	ATOM	2707	CG	GLU	1155	25.965	30.441	10.526	1.00	18.38
	ATOM	2708	CD	GLU	1155	25.928	29.256	9.566	1.00	20.81
	ATOM	2709	OE1	GLU	1155	26.798	29.162	8.720	1.00	21.79
50	ATOM	2710	OE2	GLU	1155	25.049	28.416	9.629	1.00	25.52
	ATOM	2711	C	GLU	1155	23.521	32.081	13.079	1.00	15.20
	ATOM	2712	O	GLU	1155	22.900	33.107	12.812	1.00	16.46
	ATOM	2713	N	LEU	1156	23.019	31.176	13.973	1.00	15.39
	ATOM	2714	H	LEU	1156	23.473	30.306	14.053	1.00	0.00
55	ATOM	2715	CA	LEU	1156	21.782	31.403	14.762	1.00	12.64
	ATOM	2716	CB	LEU	1156	21.558	30.195	15.717	1.00	9.65
	ATOM	2717	CG	LEU	1156	20.973	28.969	15.009	1.00	10.18
	ATOM	2718	CD1	LEU	1156	21.157	27.779	15.950	1.00	4.93
	ATOM	2719	CD2	LEU	1156	19.548	29.268	14.497	1.00	6.99
60	ATOM	2720	C	LEU	1156	21.938	32.717	15.586	1.00	13.69
	ATOM	2721	O	LEU	1156	21.037	33.535	15.626	1.00	13.03
	ATOM	2722	N	VAL	1157	23.099	33.040	16.218	1.00	14.37

	ATOM	2723	H	VAL	1157	23.776	32.335	16.232	1.00	0.00
	ATOM	2724	CA	VAL	1157	23.335	34.285	17.012	1.00	11.68
	ATOM	2725	CB	VAL	1157	24.794	34.172	17.589	1.00	12.78
	ATOM	2726	CG1	VAL	1157	25.224	35.606	18.077	1.00	10.34
5	ATOM	2727	CG2	VAL	1157	24.903	33.185	18.782	1.00	8.22
	ATOM	2728	C	VAL	1157	23.136	35.565	16.141	1.00	14.56
	ATOM	2729	O	VAL	1157	22.444	36.545	16.475	1.00	13.22
	ATOM	2730	N	GLU	1158	23.698	35.532	14.916	1.00	13.69
	ATOM	2731	H	GLU	1158	24.179	34.719	14.664	1.00	0.00
10	ATOM	2732	CA	GLU	1158	23.581	36.667	13.955	1.00	13.62
	ATOM	2733	CB	GLU	1158	24.457	36.424	12.670	1.00	15.22
	ATOM	2734	CG	GLU	1158	24.428	37.532	11.587	1.00	23.30
	ATOM	2735	CD	GLU	1158	25.089	37.106	10.241	1.00	30.69
	ATOM	2736	OE1	GLU	1158	24.947	35.951	9.800	1.00	34.95
15	ATOM	2737	OE2	GLU	1158	25.729	37.937	9.583	1.00	35.29
	ATOM	2738	C	GLU	1158	22.160	36.803	13.553	1.00	11.52
	ATOM	2739	O	GLU	1158	21.530	37.856	13.628	1.00	13.64
	ATOM	2740	N	HIS	1159	21.573	35.701	13.155	1.00	12.20
	ATOM	2741	H	HIS	1159	22.104	34.881	13.087	1.00	0.00
20	ATOM	2742	CA	HIS	1159	20.166	35.691	12.713	1.00	12.06
	ATOM	2743	C	HIS	1159	19.244	36.144	13.798	1.00	10.77
	ATOM	2744	O	HIS	1159	18.444	37.065	13.676	1.00	10.85
	ATOM	2745	CB	HIS	1159	19.805	34.270	12.267	1.00	12.95
	ATOM	2746	CG	HIS	1159	18.505	34.291	11.632	1.00	14.30
25	ATOM	2747	ND1	HIS	1159	17.510	33.405	11.936	1.00	20.58
	ATOM	2748	HD1	HIS	1159	17.506	32.743	12.659	1.00	0.00
	ATOM	2749	CD2	HIS	1159	18.058	35.126	10.619	1.00	14.65
	ATOM	2750	NE2	HIS	1159	16.793	34.736	10.311	1.00	15.60
	ATOM	2751	CE1	HIS	1159	16.454	33.687	11.117	1.00	17.65
30	ATOM	2752	N	LEU	1160	19.356	35.526	14.930	1.00	12.27
	ATOM	2753	H	LEU	1160	20.031	34.840	15.004	1.00	0.00
	ATOM	2754	CA	LEU	1160	18.494	35.911	16.067	1.00	14.93
	ATOM	2755	CB	LEU	1160	18.678	34.920	17.286	1.00	14.85
	ATOM	2756	CG	LEU	1160	18.055	33.530	16.898	1.00	16.48
35	ATOM	2757	CD1	LEU	1160	18.412	32.439	17.941	1.00	13.54
	ATOM	2758	CD2	LEU	1160	16.558	33.800	16.588	1.00	14.44
	ATOM	2759	C	LEU	1160	18.744	37.325	16.524	1.00	14.89
	ATOM	2760	O	LEU	1160	17.838	38.000	17.022	1.00	14.15
	ATOM	2761	N	GLY	1161	19.965	37.825	16.385	1.00	15.89
40	ATOM	2762	H	GLY	1161	20.691	37.246	16.082	1.00	0.00
	ATOM	2763	CA	GLY	1161	20.264	39.219	16.796	1.00	14.85
	ATOM	2764	C	GLY	1161	19.556	40.169	15.835	1.00	14.93
	ATOM	2765	O	GLY	1161	19.051	41.199	16.269	1.00	15.79
	ATOM	2766	N	ASN	1162	19.517	39.818	14.536	1.00	13.58
45	ATOM	2767	H	ASN	1162	20.069	39.052	14.264	1.00	0.00
	ATOM	2768	CA	ASN	1162	18.840	40.624	13.506	1.00	14.44
	ATOM	2769	CB	ASN	1162	19.144	40.032	12.102	1.00	14.82
	ATOM	2770	CG	ASN	1162	20.599	40.279	11.659	1.00	19.35
	ATOM	2771	OD1	ASN	1162	21.326	41.139	12.131	1.00	23.15
50	ATOM	2772	ND2	ASN	1162	21.195	39.543	10.754	1.00	21.91
	ATOM	2773	HD21	ASN	1162	20.769	38.798	10.295	1.00	0.00
	ATOM	2774	HD22	ASN	1162	22.115	39.795	10.559	1.00	0.00
	ATOM	2775	C	ASN	1162	17.322	40.619	13.751	1.00	14.81
	ATOM	2776	O	ASN	1162	16.607	41.602	13.592	1.00	14.85
55	ATOM	2777	N	LEU	1163	16.788	39.429	14.035	1.00	13.70
	ATOM	2778	H	LEU	1163	17.372	38.649	14.011	1.00	0.00
	ATOM	2779	CA	LEU	1163	15.367	39.268	14.324	1.00	13.89
	ATOM	2780	CB	LEU	1163	15.071	37.755	14.500	1.00	14.24
	ATOM	2781	CG	LEU	1163	14.297	36.982	13.364	1.00	17.75
60	ATOM	2782	CD1	LEU	1163	14.805	37.374	11.959	1.00	16.20
	ATOM	2783	CD2	LEU	1163	14.416	35.468	13.584	1.00	12.76
	ATOM	2784	C	LEU	1163	15.076	40.082	15.582	1.00	17.98

	ATOM	2785	O	LEU	1163	14.177	40.894	15.603	1.00	19.46
	ATOM	2786	N	LEU	1164	15.836	40.030	16.669	1.00	19.64
	ATOM	2787	H	LEU	1164	16.605	39.428	16.668	1.00	0.00
	ATOM	2788	CA	LEU	1164	15.528	40.831	17.870	1.00	19.91
5	ATOM	2789	CB	LEU	1164	16.597	40.506	18.942	1.00	17.11
	ATOM	2790	CG	LEU	1164	16.465	41.267	20.276	1.00	17.98
	ATOM	2791	CD1	LEU	1164	15.046	41.152	20.974	1.00	13.53
	ATOM	2792	CD2	LEU	1164	17.622	40.705	21.108	1.00	16.76
	ATOM	2793	C	LEU	1164	15.474	42.332	17.555	1.00	21.45
10	ATOM	2794	O	LEU	1164	14.639	43.081	18.099	1.00	20.88
	ATOM	2795	N	GLN	1165	16.497	42.748	16.797	1.00	21.33
	ATOM	2796	H	GLN	1165	17.204	42.118	16.572	1.00	0.00
	ATOM	2797	CA	GLN	1165	16.631	44.141	16.342	1.00	23.29
	ATOM	2798	CB	GLN	1165	17.898	44.297	15.431	1.00	22.92
15	ATOM	2799	CG	GLN	1165	18.122	45.705	14.864	1.00	24.62
	ATOM	2800	CD	GLN	1165	17.740	46.823	15.855	1.00	25.73
	ATOM	2801	OE1	GLN	1165	18.074	46.914	17.053	1.00	26.75
	ATOM	2802	NE2	GLN	1165	17.001	47.779	15.341	1.00	23.23
	ATOM	2803	HE21	GLN	1165	16.718	47.764	14.414	1.00	0.00
20	ATOM	2804	HE22	GLN	1165	16.742	48.485	15.961	1.00	0.00
	ATOM	2805	C	GLN	1165	15.368	44.522	15.563	1.00	23.93
	ATOM	2806	O	GLN	1165	14.884	45.657	15.674	1.00	25.04
	ATOM	2807	N	ALA	1166	14.905	43.635	14.689	1.00	23.83
	ATOM	2808	H	ALA	1166	15.212	42.712	14.682	1.00	0.00
25	ATOM	2809	CA	ALA	1166	13.659	44.020	14.020	1.00	25.01
	ATOM	2810	CB	ALA	1166	13.524	43.007	12.811	1.00	17.81
	ATOM	2811	C	ALA	1166	12.351	44.186	14.861	1.00	26.97
	ATOM	2812	O	ALA	1166	12.135	43.827	16.056	1.00	28.99
	ATOM	2814	C01	AGI	1	14.657	29.228	41.517	1.00	12.23
30	ATOM	2815	C02	AGI	1	14.888	27.853	41.286	1.00	10.52
	ATOM	2816	N03	AGI	1	13.872	26.949	41.331	1.00	14.11
	ATOM	2817	C04	AGI	1	12.601	27.333	41.596	1.00	13.51
	ATOM	2818	C05	AGI	1	12.294	28.701	41.836	1.00	15.19
	ATOM	2819	C06	AGI	1	13.344	29.663	41.802	1.00	14.87
35	ATOM	2820	C07	AGI	1	20.645	24.445	38.653	1.00	12.96
	ATOM	2821	C08	AGI	1	19.245	24.269	38.867	1.00	14.35
	ATOM	2822	C09	AGI	1	18.433	25.295	39.396	1.00	13.86
	ATOM	2823	C10	AGI	1	19.059	26.520	39.713	1.00	12.39
	ATOM	2824	C11	AGI	1	20.463	26.702	39.508	1.00	12.85
40	ATOM	2825	C12	AGI	1	21.247	25.678	38.988	1.00	13.36
	ATOM	2826	C13	AGI	1	18.625	27.749	40.235	1.00	11.17
	ATOM	2827	N14	AGI	1	19.686	28.609	40.341	1.00	11.91
	ATOM	2828	N15	AGI	1	20.808	27.957	39.885	1.00	11.20
	ATOM	2829	C16	AGI	1	17.241	28.211	40.676	1.00	10.07
45	ATOM	2830	C17	AGI	1	16.195	27.381	40.784	1.00	10.09
	ATOM	2831	C18	AGI	1	22.894	23.344	38.259	1.00	7.74
	ATOM	2832	C19	AGI	1	23.458	23.542	39.517	1.00	7.49
	ATOM	2833	C20	AGI	1	24.812	23.276	39.756	1.00	9.47
	ATOM	2834	C21	AGI	1	25.637	22.823	38.688	1.00	10.66
50	ATOM	2835	C22	AGI	1	25.060	22.678	37.389	1.00	9.86
	ATOM	2836	C23	AGI	1	23.697	22.931	37.224	1.00	9.43
	ATOM	2837	C24	AGI	1	21.454	23.439	38.008	1.00	10.64
	ATOM	2838	O25	AGI	1	20.907	22.657	37.228	1.00	11.90
	ATOM	2839	N26	AGI	1	25.810	22.349	36.304	1.00	12.00
55	ATOM	2840	C27	AGI	1	25.706	22.897	35.080	1.00	11.76
	ATOM	2841	O28	AGI	1	24.860	23.766	34.843	1.00	14.03
	ATOM	2842	C29	AGI	1	26.533	22.403	34.084	1.00	11.69
	ATOM	2843	N30	AGI	1	26.886	23.012	32.888	1.00	13.97
	ATOM	2844	N31	AGI	1	27.721	22.093	32.207	1.00	15.02
60	ATOM	2845	C33	AGI	1	27.845	20.979	32.956	1.00	14.21
	ATOM	2846	C34	AGI	1	27.122	21.150	34.128	1.00	12.95
	ATOM	2847	C50	AGI	1	26.442	24.302	32.306	1.00	12.41

	ATOM	2848	C61	AGI	1	28.507	19.753	32.483	1.00	14.39
	ATOM	2849	C62	AGI	1	27.491	25.341	31.972	1.00	12.87
	ATOM	2850	C63	AGI	1	27.040	22.419	39.025	1.00	4.72
	ATOM	2851	C64	AGI	1	25.624	24.082	31.015	1.00	9.99
5	ATOM	2852	H46	AGI	1	21.707	28.342	39.868	1.00	0.00
	ATOM	2855	H52	AGI	1	26.503	21.681	36.437	1.00	0.00
	ATOM	2856	OH2	WAT	1	21.326	15.278	31.552	1.00	40.62
	ATOM	2859	OH2	WAT	2	21.122	12.135	34.733	1.00	20.69
	ATOM	2862	OH2	WAT	3	19.111	11.893	36.318	1.00	28.54
10	ATOM	2865	OH2	WAT	4	36.002	23.269	51.395	1.00	10.20
	ATOM	2868	OH2	WAT	5	27.957	15.413	47.018	1.00	6.01
	ATOM	2871	OH2	WAT	6	30.208	3.049	45.574	1.00	25.23
	ATOM	2874	OH2	WAT	7	35.908	6.812	36.342	1.00	24.75
	ATOM	2877	OH2	WAT	8	12.089	21.268	28.643	1.00	11.91
15	ATOM	2880	OH2	WAT	9	8.284	23.360	27.605	1.00	13.03
	ATOM	2883	OH2	WAT	10	7.168	15.310	27.797	1.00	18.13
	ATOM	2886	OH2	WAT	11	-2.983	28.550	27.886	1.00	15.16
	ATOM	2889	OH2	WAT	12	-2.275	37.088	28.131	1.00	22.52
	ATOM	2892	OH2	WAT	13	14.309	38.611	34.575	1.00	19.70
20	ATOM	2895	OH2	WAT	14	7.291	42.804	21.456	1.00	19.86
	ATOM	2898	OH2	WAT	15	9.260	21.856	32.707	1.00	38.34
	ATOM	2901	OH2	WAT	16	14.114	32.622	9.695	1.00	21.03
	ATOM	2904	OH2	WAT	17	10.414	37.234	13.886	1.00	22.43
	ATOM	2907	OH2	WAT	18	29.146	37.239	28.517	1.00	17.72
25	ATOM	2910	OH2	WAT	19	35.368	33.301	30.265	1.00	16.57
	ATOM	2913	OH2	WAT	20	23.729	16.727	21.263	1.00	16.27
	ATOM	2916	OH2	WAT	21	18.412	16.139	23.628	1.00	8.38
	ATOM	2919	OH2	WAT	22	20.274	7.299	21.586	1.00	39.84
	ATOM	2922	OH2	WAT	23	15.089	22.125	7.341	1.00	29.02
30	ATOM	2925	OH2	WAT	24	29.968	13.621	47.542	1.00	7.11
	ATOM	2928	OH2	WAT	25	36.009	29.181	57.592	1.00	27.24
	ATOM	2931	OH2	WAT	26	9.884	20.414	30.164	1.00	15.48
	ATOM	2934	OH2	WAT	27	1.007	22.249	27.229	1.00	17.18
	ATOM	2937	OH2	WAT	28	13.415	13.833	18.213	1.00	13.87
35	ATOM	2940	OH2	WAT	29	19.990	15.760	19.898	1.00	23.23
	ATOM	2943	OH2	WAT	30	1.586	26.470	20.830	1.00	9.68
	ATOM	2946	OH2	WAT	31	32.958	30.321	36.397	1.00	14.63
	ATOM	2949	OH2	WAT	32	36.163	31.069	24.083	1.00	59.32
	ATOM	2952	OH2	WAT	33	14.712	18.180	39.370	1.00	30.96
40	ATOM	2955	OH2	WAT	34	19.488	37.646	9.614	1.00	33.22
	ATOM	2958	OH2	WAT	35	11.039	12.958	25.121	1.00	17.87
	ATOM	2961	OH2	WAT	36	37.210	29.020	34.742	1.00	19.32
	ATOM	2964	OH2	WAT	37	13.045	15.428	38.169	1.00	37.63
	ATOM	2967	OH2	WAT	38	10.982	21.290	34.600	1.00	24.69
45	ATOM	2970	OH2	WAT	39	19.683	12.262	51.020	1.00	18.71
	ATOM	2973	OH2	WAT	40	21.744	37.281	46.695	1.00	22.93
	ATOM	2976	OH2	WAT	41	28.788	33.762	22.409	1.00	13.24
	ATOM	2979	OH2	WAT	42	27.295	25.113	15.877	1.00	19.50
	ATOM	2982	OH2	WAT	43	4.156	8.840	24.882	1.00	44.83
50	ATOM	2985	OH2	WAT	44	7.599	20.677	28.597	1.00	22.41
	ATOM	2988	OH2	WAT	45	4.099	26.412	35.222	1.00	26.02
	ATOM	2991	OH2	WAT	46	-5.126	26.885	28.174	1.00	8.28
	ATOM	2994	OH2	WAT	47	14.163	41.346	37.612	1.00	36.83
	ATOM	2997	OH2	WAT	48	15.403	30.973	7.890	1.00	30.54
55	ATOM	3000	OH2	WAT	49	19.092	31.462	8.139	1.00	58.96
	ATOM	3003	OH2	WAT	50	17.155	17.661	25.588	1.00	11.94
	ATOM	3006	OH2	WAT	51	21.191	18.666	23.398	1.00	10.12
	ATOM	3009	OH2	WAT	52	26.582	14.171	12.746	1.00	16.95
	ATOM	3012	OH2	WAT	53	1.621	33.696	15.903	1.00	40.51
60	ATOM	3015	OH2	WAT	54	23.133	33.673	10.092	1.00	11.44
	ATOM	3018	OH2	WAT	55	0.665	22.521	22.322	1.00	17.92
	ATOM	3021	OH2	WAT	56	8.571	12.272	26.250	1.00	14.87

	ATOM	3024	OH2	WAT	57	8.739	41.024	32.785	1.00	41.13
	ATOM	3027	OH2	WAT	58	13.568	21.758	35.139	1.00	32.58
	ATOM	3030	OH2	WAT	59	6.710	22.465	36.178	1.00	27.76
	ATOM	3033	OH2	WAT	60	16.651	28.180	50.999	1.00	16.71
5	ATOM	3036	OH2	WAT	61	20.228	29.243	53.230	1.00	22.89
	ATOM	3039	OH2	WAT	62	24.339	24.401	56.759	1.00	42.24
	ATOM	3042	OH2	WAT	63	29.898	36.602	47.827	1.00	15.75
	ATOM	3045	OH2	WAT	64	25.709	37.413	54.297	1.00	2.79
	ATOM	3048	OH2	WAT	65	23.280	41.339	53.434	1.00	46.05
10	ATOM	3051	OH2	WAT	66	24.076	40.573	50.819	1.00	29.20
	ATOM	3054	OH2	WAT	67	22.373	34.699	38.292	1.00	21.93
	ATOM	3057	OH2	WAT	68	10.070	38.965	33.761	1.00	42.65
	ATOM	3060	OH2	WAT	69	1.837	20.637	23.877	1.00	17.56
	ATOM	3063	OH2	WAT	70	-0.302	24.519	24.058	1.00	30.58
15	ATOM	3066	OH2	WAT	71	16.620	24.213	6.070	1.00	53.95
	ATOM	3069	OH2	WAT	72	29.377	23.172	13.079	1.00	29.35
	ATOM	3072	OH2	WAT	73	32.068	32.850	22.056	1.00	33.38
	ATOM	3075	OH2	WAT	74	29.189	36.119	23.475	1.00	31.79
	ATOM	3078	OH2	WAT	75	30.528	14.083	34.616	1.00	33.71
20	ATOM	3081	OH2	WAT	76	18.803	15.430	33.887	1.00	22.21
	ATOM	3084	OH2	WAT	77	30.636	3.117	42.678	1.00	24.91
	ATOM	3087	OH2	WAT	78	35.618	31.102	35.443	1.00	12.62
	ATOM	3090	OH2	WAT	79	35.412	30.339	46.030	1.00	22.58
	ATOM	3093	OH2	WAT	80	33.533	13.470	49.934	1.00	38.40
25	ATOM	3096	OH2	WAT	81	35.138	15.589	47.560	1.00	49.63
	ATOM	3099	OH2	WAT	82	17.684	35.293	47.161	1.00	50.48
	ATOM	3102	OH2	WAT	83	21.563	35.750	44.071	1.00	41.03
	ATOM	3105	OH2	WAT	84	22.272	35.570	41.561	1.00	33.49
	ATOM	3108	OH2	WAT	85	20.337	14.435	23.547	1.00	18.84
30	ATOM	3111	OH2	WAT	86	18.635	35.567	40.040	1.00	20.39
	ATOM	3114	OH2	WAT	87	12.484	16.399	17.879	1.00	13.75
	ATOM	3117	OH2	WAT	88	9.684	19.007	14.941	1.00	11.44
	ATOM	3120	OH2	WAT	89	25.317	15.393	14.846	1.00	19.23
	ATOM	3123	OH2	WAT	90	20.853	5.113	10.550	1.00	42.74
35	ATOM	3126	OH2	WAT	91	19.040	24.627	7.686	1.00	40.90
	ATOM	3129	OH2	WAT	92	2.982	19.599	16.594	1.00	22.53
	ATOM	3132	OH2	WAT	93	14.681	24.573	40.178	1.00	16.19
	ATOM	3135	OH2	WAT	94	12.896	25.375	38.166	1.00	16.64
	ATOM	3138	OH2	WAT	95	10.421	26.185	38.637	1.00	19.63
40	ATOM	3141	OH2	WAT	96	10.508	28.355	36.780	1.00	7.73
	ATOM	3144	OH2	WAT	97	24.817	16.201	37.345	1.00	13.66
	ATOM	3147	OH2	WAT	98	19.583	17.862	32.567	1.00	30.31
	ATOM	3150	OH2	WAT	99	36.696	32.185	32.118	1.00	43.55
	ATOM	3153	OH2	WAT	100	30.378	29.467	11.185	1.00	15.80
45	ATOM	3156	OH2	WAT	101	17.522	20.998	51.523	1.00	20.67
	ATOM	3159	OH2	WAT	102	-2.246	31.648	34.359	1.00	25.96
	ATOM	3162	OH2	WAT	103	41.235	27.544	37.500	1.00	35.27
	ATOM	3165	OH2	WAT	104	42.883	15.602	37.183	1.00	22.18
	ATOM	3168	OH2	WAT	105	20.640	30.814	10.293	1.00	28.02
50	ATOM	3171	OH2	WAT	106	18.246	30.180	10.791	1.00	33.19
	ATOM	3174	OH2	WAT	107	25.751	19.552	29.534	1.00	13.87
	ATOM	3177	OH2	WAT	108	31.295	36.890	31.258	1.00	33.53
	ATOM	3180	OH2	WAT	109	27.712	21.370	29.184	1.00	18.70
	ATOM	3183	OH2	WAT	110	27.435	14.737	36.228	1.00	52.00
55	ATOM	3186	OH2	WAT	111	21.338	39.310	35.683	1.00	49.00
	ATOM	3189	OH2	WAT	112	23.556	37.754	35.494	1.00	72.91
	ATOM	3192	OH2	WAT	113	26.958	35.986	34.773	1.00	29.61
	ATOM	3195	OH2	WAT	114	29.712	36.848	33.733	1.00	46.80
	ATOM	3198	OH2	WAT	115	32.223	28.024	35.019	1.00	10.03
60	ATOM	3201	OH2	WAT	116	28.836	28.180	16.413	1.00	28.80
	ATOM	3204	OH2	WAT	117	26.242	24.136	9.219	1.00	26.46
	ATOM	3207	OH2	WAT	118	37.076	24.349	55.142	1.00	53.88

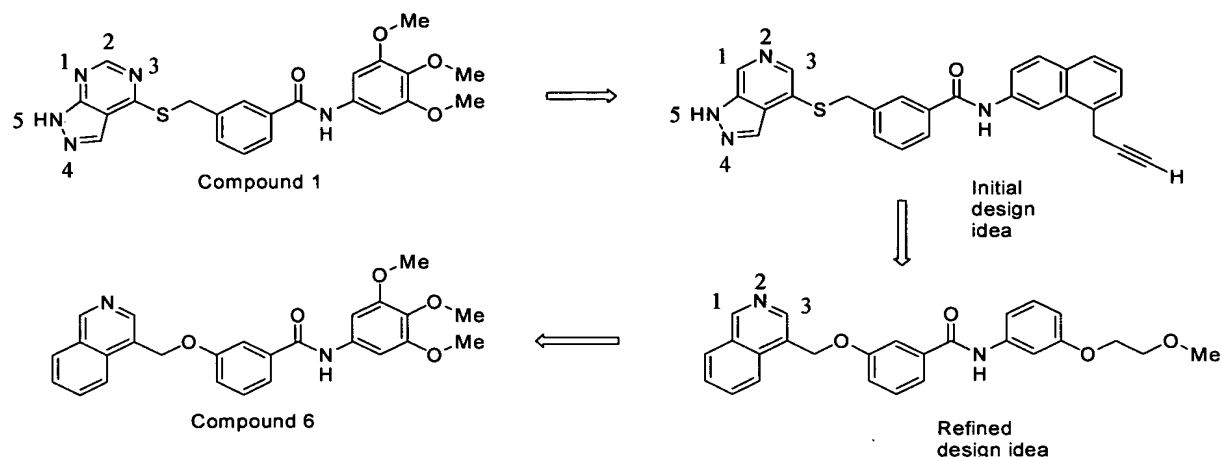


5	ATOM	3210	OH2	WAT	119	16.584	18.239	50.274	1.00	50.32
	ATOM	3213	OH2	WAT	120	20.687	19.041	52.502	1.00	60.59
	ATOM	3216	OH2	WAT	121	19.388	11.344	30.526	1.00	31.54
	ATOM	3219	OH2	WAT	122	13.781	27.181	48.254	1.00	48.78
	ATOM	3222	OH2	WAT	123	30.389	27.761	33.210	1.00	21.69
10	ATOM	3225	OH2	WAT	124	40.253	28.434	33.917	1.00	75.10
	ATOM	3228	OH2	WAT	125	39.462	21.892	34.709	1.00	19.15
	ATOM	3231	OH2	WAT	126	27.354	16.631	28.101	1.00	22.84
	ATOM	3234	OH2	WAT	127	37.264	13.998	45.657	1.00	40.56
	ATOM	3237	OH2	WAT	128	35.959	12.392	43.394	1.00	41.21
15	ATOM	3240	OH2	WAT	129	36.794	12.046	40.541	1.00	72.34
	ATOM	3243	OH2	WAT	130	37.245	13.504	37.819	1.00	24.43
	ATOM	3246	OH2	WAT	131	36.721	10.256	37.335	1.00	42.59
	ATOM	3249	OH2	WAT	132	40.288	11.871	37.990	1.00	36.66
	ATOM	3252	OH2	WAT	133	24.153	7.378	49.364	1.00	25.67
20	ATOM	3255	OH2	WAT	134	19.986	11.143	39.784	1.00	10.74
	ATOM	3258	OH2	WAT	135	19.218	9.612	37.696	1.00	31.06
	ATOM	3261	OH2	WAT	136	16.245	9.526	38.034	1.00	44.29
	ATOM	3264	OH2	WAT	137	11.126	18.199	32.681	1.00	30.63
	ATOM	3267	OH2	WAT	138	7.259	18.098	27.972	1.00	21.94
25	ATOM	3270	OH2	WAT	139	-0.413	33.704	33.451	1.00	24.97
	ATOM	3273	OH2	WAT	140	12.755	20.682	9.178	1.00	11.64
	ATOM	3276	OH2	WAT	141	26.028	20.695	4.318	1.00	27.37
	ATOM	3279	OH2	WAT	142	34.962	22.629	53.842	1.00	61.06
	ATOM	3282	OH2	WAT	143	27.025	23.617	54.543	1.00	53.62
30	ATOM	3285	OH2	WAT	144	7.555	12.566	14.146	1.00	26.52
	ATOM	3288	OH2	WAT	145	5.587	17.643	9.027	1.00	29.81
	ATOM	3291	OH2	WAT	146	29.852	36.461	40.397	1.00	35.57
	ATOM	3294	OH2	WAT	147	11.764	40.251	37.125	1.00	49.71
	ATOM	3297	OH2	WAT	148	5.458	33.528	37.234	1.00	42.83
35	ATOM	3300	OH2	WAT	149	7.202	37.344	36.336	1.00	31.47
	ATOM	3303	OH2	WAT	150	4.077	13.900	22.925	1.00	34.83
	ATOM	3306	OH2	WAT	151	36.124	30.826	29.114	1.00	20.92
	ATOM	3309	OH2	WAT	152	32.404	35.448	28.112	1.00	37.67
	ATOM	3312	OH2	WAT	153	28.928	36.235	19.814	1.00	25.08
40	ATOM	3315	OH2	WAT	154	31.185	28.578	18.639	1.00	31.69
	ATOM	3318	OH2	WAT	155	31.464	15.828	18.034	1.00	32.81
	ATOM	3321	OH2	WAT	156	28.801	10.653	19.297	1.00	11.68
	ATOM	3324	OH2	WAT	157	27.123	7.555	21.919	1.00	27.17
	ATOM	3327	OH2	WAT	158	26.267	4.503	15.012	1.00	16.48
45	ATOM	3330	OH2	WAT	159	14.887	13.382	9.322	1.00	47.34
	ATOM	3333	OH2	WAT	160	15.567	28.507	5.142	1.00	35.81
	ATOM	3336	OH2	WAT	161	7.392	30.513	8.486	1.00	18.19
	ATOM	3339	OH2	WAT	162	1.107	30.087	15.076	1.00	25.99
	ATOM	3342	OH2	WAT	163	-4.134	26.350	20.855	1.00	29.50
50	ATOM	3345	OH2	WAT	164	4.528	15.330	28.802	1.00	41.12
	ATOM	3348	OH2	WAT	165	7.565	17.971	32.120	1.00	44.61
	ATOM	3351	OH2	WAT	166	31.483	16.529	33.377	1.00	27.78
	ATOM	3354	OH2	WAT	167	31.005	13.417	29.720	1.00	42.53
	ATOM	3357	OH2	WAT	168	34.705	12.405	31.083	1.00	30.74
55	ATOM	3360	OH2	WAT	169	31.438	7.615	37.109	1.00	44.32
	ATOM	3363	OH2	WAT	170	9.475	31.639	38.599	1.00	30.55
	ATOM	3366	OH2	WAT	171	9.215	30.905	41.122	1.00	43.94
	ATOM	3369	OH2	WAT	172	7.419	29.700	37.818	1.00	27.59

**TABLE 6**  
**VEGFR2 Ligand Binding Site**  
**Residues Within 5 Å of Ligand Atoms**

Amino Acid Residue	Compound 3	Compound 4	Compound 5
L840	+	+	+
V848	+	+	+
E850	+		
A866	+	+	+
V867		+	+
K868	+	+	+
E885	+	+	+
I888	+	+	+
L889	+	+	+
I892	+	+	+
V898		+	+
V899	+	+	+
V914	+	+	+
V916	+	+	+
E917	+	+	+
F918	+	+	+
C919	+	+	+
K920	+	+	+
F921		+	+
G922	+	+	+
N923	+	+	+
L1019	+	+	+
C1024		+	
I1025		+	
H1026	+		+
L1035	+	+	+
I1044	+	+	+
C1045	+	+	+
D1046	+	+	+
F1047	+	+	+

**Example 5: Use of VEGFR2KD:Compound 1 Co-Crystal Structure in the Design of New VEGFR Inhibitors**



5

Using the program QUIKVU (developed by Agouron/Pfizer Pharmaceuticals, San Diego, CA), the co-crystal structure of Compound 1 bound to VEGFR2KD (See Table 1 for atomic coordinates) was displayed graphically and the key interactions of the ligand and the protein were analyzed. (QUIKVU was developed by Agouron/Pfizer Pharmaceuticals, San Diego, CA and is not commercially available. Other display programs that could be used include Quanta (Accelrys Inc., San Diego, CA), INSIGHT II (Accelrys Inc., San Diego, CA), or XTALVIEW (Scripps Research Institute, La Jolla, CA)). A key observation was that N1 and N3 of Compound 6 were not making effective hydrogen bonds to the protein, as judged by both distance and geometrical considerations. On the other hand, C2 was within van der Waals radius (3.12 Å) of the backbone NH of Cys-919. Therefore, an initial design idea was to replace C2 with a nitrogen to function as a H-bond acceptor, and to replace N1 and N3 with carbon, to eliminate unfavorable desolvation penalties associated with binding to these H-bond acceptors. Computationally, this initial design idea was evaluated in the context of additional modifications to the "right-hand" anilide moiety, in that the trimethoxyphenyl group was replaced with a propargyl-naphthyl moiety. A further refinement was to replace the fused pyrazolyl moiety with a fused benzo ring, since N4 and N5 were not making H-bonds directly to the protein, with additional changes in the "right-hand" aryl group as well as the "linker" (-SCH<sub>2</sub>- to -CH<sub>2</sub>O-) in order to improve synthetic accessibility. These two designs (as well as the model for Compound 1) were sequentially submitted to the following computational model for estimating relative energetics of ligand binding:

20

25

- (1) Using the MacroModel program suite (Schrodinger, Portland, OR), a "substructure" of the protein was created from the crystallographic coordinates set forth in Table 1 which consisted of protein atoms (no solvent) within ca. 10 Å of the inhibit.

- (2) Energetic constraints were placed on the protein atoms not directly in contact with the inhibitor, in order that the active site would remain properly oriented during force field minimization, but still retain some flexibility to accommodate movement of the ligand.
- (3) the ligand file, properly oriented in the active site in analogy to the crystallographically determined coordinates set forth in Table 1 of Compound 1, were merged with the protein file, and the resulting complex was submitted to Macromodel force field minimization using the AMBER\* force field and the GBSA continuum solvation model using the BATCHMIN program. The resulting minimized energy was recorded and the coordinates of the minimized complex stored to file.
- (4) the ligand was "extracted" from the minimized complex, and subjected to force field minimization by itself (AMBER\*/GBSA/ BATCHMIN). Once again, coordinates were saved and the energy recorded.
- (5) The relative binding affinities were then predicted based on the formula:

$$\Delta E = \{E(\text{ligand-complex}) - E(\text{ligand})\} - \{E(\text{Compound 1-complex}) - E(\text{Compound 1})\}$$

For the initial design idea,  $\Delta E$  was calculated to be  $-6.0$  kcal/mol, relative to Compound 1, while the refined design idea gave a calculated value of  $-3.1$  kcal/mol. In general, the calculated  $\Delta E$  values generally overestimate actual differences by several-fold; nonetheless, the favorable energetics predicted from this modeling led to the prioritization of the refined design idea for subsequent synthesis. On the basis of synthetic considerations and the desire to examine single structural modifications sequentially, the first synthetic target completed, Compound 6, retained the "right-hand" trimethoxyphenyl group of Compound 1. Testing of Compound 6 in the enzyme ELISA assay, using phosphorylated VEGFR2KD, revealed it to be a potent inhibitor of VEGFR kinase activity with a  $K_i$  of 138 nM.

#### 25 **Example 6: Activity measurements: Enzyme assays**

Assays were used to determine the ability of a test compound to inhibit tyrosine kinase activity of VEGFR2KD. Autophosphorylation of the purified VEGFR2KD (SEQ ID NO: 3) was performed by incubation of the enzyme at a concentration of 4  $\mu$ M in the presence of 3 mM ATP and 40 mM  $\text{MgCl}_2$  in 100 mM HEPES, pH 7.5, containing 5% glycerol and 5 mM DTT, at 4  $^\circ\text{C}$  for 2 h. After autophosphorylation, the VEGFR2KD construct has been shown to possess catalytic activity essentially equivalent to the wild-type autophosphorylated kinase domain construct. See Parast et al., *Biochemistry*, 37, 16788-16801 (1998).

#### Coupled Spectrophotometric Assay

The production of ADP from ATP that accompanies phosphoryl transfer was coupled to oxidation of NADH using phosphoenolpyruvate (PEP) and a system having pyruvate kinase (PK) and lactic dehydrogenase (LDH). The oxidation of NADH was monitored by following the decrease of absorbance at 340 nm ( $\epsilon_{340} = 6.22 \text{ cm}^{-1} \text{ mM}^{-1}$ ) using a Beckman DU 650 spectrophotometer. Assay conditions for phosphorylated VEGF-R2KD were the following: 1 mM PEP; 250  $\mu$ M NADH; 50 units of LDH/mL; 20 units of PK/mL; 5 mM DTT; 5.1 mM poly( $\text{E}_4\text{Y}_1$ ); 1 mM ATP; and 25 mM  $\text{MgCl}_2$  in 200 mM HEPES, pH 7.5. Assay conditions for unphosphorylated VEGF-R2KD (indicated as FLVK in the tables) were the following: 1 mM PEP; 250  $\mu$ M NADH; 50 units of LDH/mL; 20 units of PK/mL; 5 mM

DTT; 20 mM poly(E<sub>4</sub>Y<sub>1</sub>); 3 mM ATP; and 60 mM MgCl<sub>2</sub> and 2 mM MnCl<sub>2</sub> in 200 mM HEPES, pH 7.5. Assays were initiated with 5 to 40 nM of enzyme. K<sub>i</sub> values were determined by measuring enzyme activity in the presence of varying concentrations of test compounds. The data were analyzed using Enzyme Kinetic and Kaleidagraph software.

#### 5 ELISA Assay

Formation of phosphogastrin was monitored using biotinylated gastrin peptide (1-17) as substrate. Biotinylated phosphogastrin was immobilized using streptavidin coated 96-well microtiter plates followed by detection using anti-phosphotyrosine-antibody conjugated to horseradish peroxidase. The activity of horseradish peroxidase was monitored using 2,2'-azino-di-[3-ethylbenzothiazoline sulfonate(6)] diammonium salt (ABTS). Typical assay solutions contained: 2  
10 μM biotinylated gastrin peptide; 5 mM DTT; 20 μM ATP; 26 mM MgCl<sub>2</sub>; and 2 mM MnCl<sub>2</sub> in 200 mM HEPES, pH 7.5. The assay was initiated with 0.8 nM of phosphorylated VEGF-R2KD. Horseradish peroxidase activity was assayed using ABTS, 10 mM. The horseradish peroxidase reaction was quenched by addition of acid (H<sub>2</sub>SO<sub>4</sub>), followed by absorbance reading at 405 nm. K<sub>i</sub> values were  
15 determined by measuring enzyme activity in the presence of varying concentrations of test compounds. The data were analyzed using Enzyme Kinetic and Kaleidagraph software.

#### **Example 7: Calculation of Sequence Alignments for VEGFR2 and VEGFR1 and VEGFR3**

20 The protein sequences of human full-length VEGFR1 (SEQ ID NO: 4; Swiss-Prot Accession Number P17948), VEGFR2 (SEQ ID NO: 2; Swiss-Prot Accession Number P35968), and VEGFR3 (SEQ ID NO: 5; Swiss-Prot Accession Number P35916) were obtained from the Swiss-Prot Protein Knowledgebase (European Bioinformatics Institute, Cambridge, UK) using the internet site [www.ebi.ac.uk/swissprot](http://www.ebi.ac.uk/swissprot). The sequence regions encompassing the kinase domains, with the kinase  
25 insert domains included, were aligned using the Multiple Sequence Alignment tool in InsightII (98.0) (Accelrys, San Diego, CA). (See Table 7)

For the VEGFR2 amino acid residues 806-1171 of SEQ ID NO: 1, encompassing the kinase domain with the kinase insert domain included, the % identity to VEGFR1 is 73.84% and the percent identity to VEGFR3 is 67.75%. For the VEGFR2 catalytic kinase domain (amino acid residues 806-  
30 932 and 1001-1171 of SEQ ID NO: 1), the percent identity to VEGFR1 and VEGFR3 is 80.26% and 78.26% respectively. For residues that define the VEGFR2 ligand binding site (as defined above), the sequence identity to VEGFR1 and VEGFR3 is 90.00% and 96.66% respectively.

**TABLE 7**

#### 35 Sequence Alignment of Human VEGFR Kinase Domains

VEGFR1: mdpdevpldeqcerlpydaskwefarerlklgkslgrgafgkvvqasafg  
VEGFR2: mdpdelpldehcerlpydaskwefprdrklgkplgrgafgqvieadafg (855)  
VEGFR3: mdpgevpleeqceylsydasqweprerlhlgrvlgygafgkvveasafg  
40 VEGFR1: ikksptcrtvavkmlkegataseykalmtelkilhghhlnvvnllgac  
VEGFR2: idktatcrtvavkmlkegathsehralmseklilhghhlnvvnllgac (905)  
VEGFR3: ihkgsscdtvavkmlkegatasehralmseklilhghhlnvvnllgac

VEGFR1: tkqggplmviveyckyglnlsnylkskrdlfflnkdaalhmeppkkekmepg  
 VEGFR2: tkpggplmvivefckfgnlstylrsknef-vpyktkgarfrqgkdyvga (954)  
 VEGFR3: tkpqqplmvivefckyglnlsnflakrdaf---spcaekspeqrgrfram

5 VEGFR1: leqgkprldsvtssesfassgfqedkslsdveeedsdgfykepitmed  
 VEGFR2: ipvdlkrrldsitssqssassgfveekslsdveeeeapedlykdfltleh (1004)  
 VEGFR3: velarldrrrpgssdrvlfarfskteggarraspdqaedlwlspitmed

10 VEGFR1: lisysfqvargmeflssrkcihrdlaarnillsennvvcidfglardi  
 VEGFR2: licysfqvakgmeflasrkcihrdlaarnillseknvvcidfglardi (1054)  
 VEGFR3: lvcysfqvargmeflasrkcihrdlaarnillsesdvvcidfglardi

15 VEGFR1: knpdyvrkgdtrlpkwmapesifdkistksdvwsygvllweifslggs  
 VEGFR2: kdpdyvrkgdarlpkwmapietifdrvytiqsdvwsfgvllweifslgas (1104)  
 VEGFR3: kdpdyvrkgdarlpkwmapesifdkvyttqsdvwsfgvllweifslgas

20 VEGFR1: pypgvqmdedfcsrlregmrmrapeystpeiymldcwhrdpkerprfa  
 VEGFR2: pypgvkideefcrrlkegrmrmapdyttemyqtmldcwhgepsqrptfs (1154)  
 VEGFR3: pypgvqineefcqlrdgtrmrapelatpairimlncwsgdpkarpafs

VEGFR1: elveklgdllqanvqqd  
 VEGFR2: elvehlgllqanaqqd (1171)  
 VEGFR3: elveilgdllqgrglqe

25 The practice of the present invention generally employs conventional techniques of molecular biology, microbiology, recombinant DNA, immunology, protein chemistry and crystallography, which are well-within the purview of the skilled artisan. Such techniques are explained fully in the literature. See, e.g., Sambrook *et al.*, "Molecular Cloning: A Laboratory Manual," 3<sup>rd</sup> ed. (2001), Cold Spring Harbor Press, Cold Spring Harbor, NY; Glover, ed., "DNA Cloning: A Practical Approach," Volumes I and II, 2<sup>nd</sup> (1995), IRL Press, Oxford, England; Ausbel *et al.*, eds., "Current Protocols in Molecular Biology" (1994), Green Publishers Inc. and Wiley and Sons, New York, NY; Innis *et al.*, eds., "PCR Protocols: A Guide to Methods and Applications" (1990), Academic Press, San Diego, CA; Freshney "Culture of Animal Cells: A Manual of Basic Technique," 4<sup>th</sup> ed. (2000), Wiley & Sons, New York, NY; and Perbal, "A Practical Guide to Molecular Cloning," 2<sup>nd</sup> ed. (1988), Wiley & Sons, New York, NY.

35 All articles, books, patents, patent applications and patent publications cited herein are incorporated by reference in their entirety.

While the invention has been illustrated by reference to specific and preferred embodiments, those skilled in the art will recognize that variations and modifications may be made through routine experimentation and practice of the invention. Thus, the invention is intended not to be limited by the foregoing description, but to be defined by the appended claims and their equivalents.

40